How NYC Film Helps Tell the RR Story

December 8, 1958

RAILWAY AGE *weekly*

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Men Who Build the Future of American Railroads

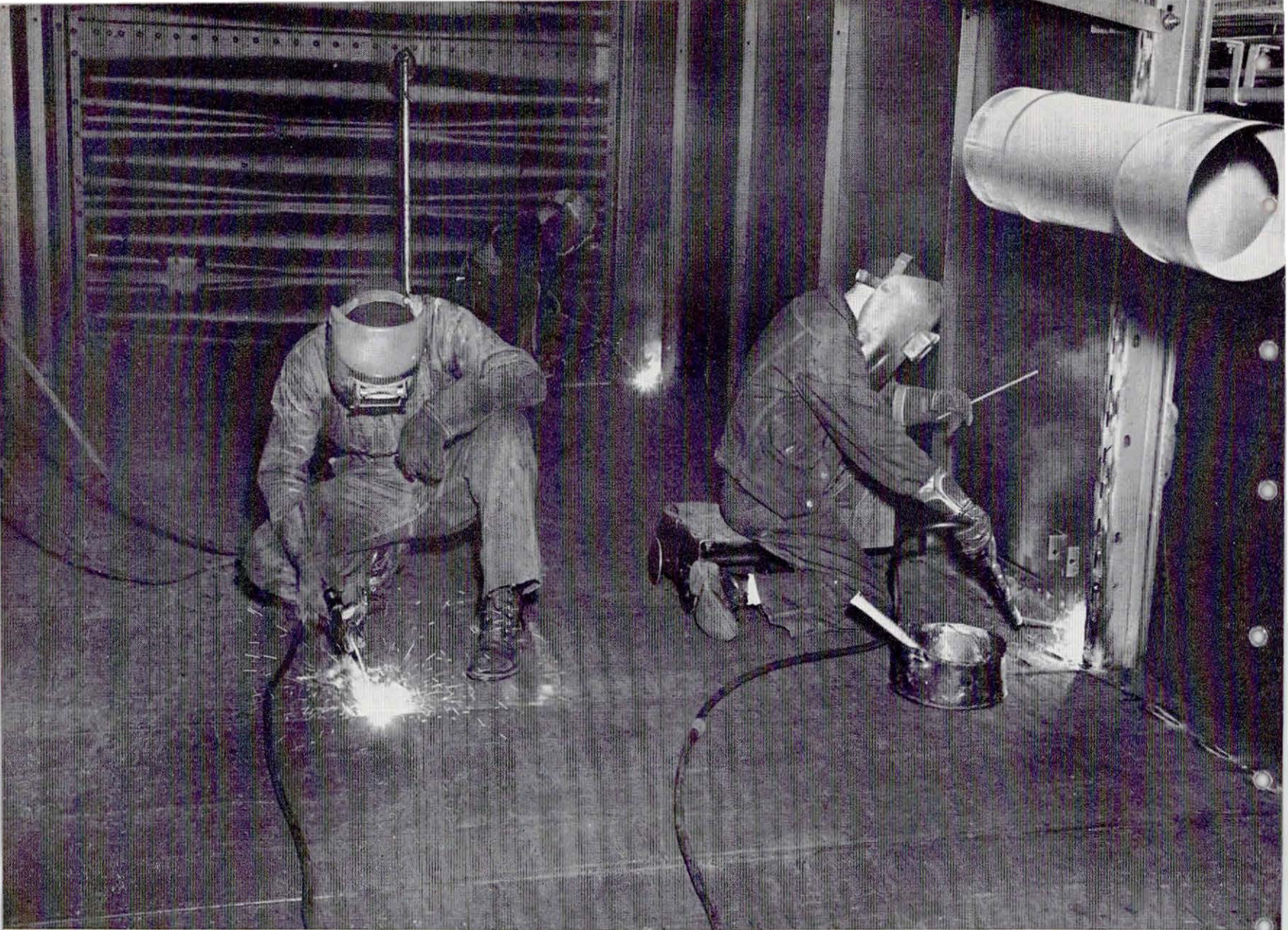
"The Milwaukee Road is dedicated to the belief that there will always be good demand for a product or service that offers what the buyer wants. In spite of current operating difficulties in certain segments of the railroad industry, the demand for railroad services can be expanded in the future.

"Current regulatory laws sometimes make this attitude difficult to maintain. Yet, the Milwaukee Road is making a twenty-million dollar investment in the future, with the delivery this year, of 1605 new freight cars and 10 new Diesel locomotives. An outlay, we feel, that will be more than justified by anticipated industry expansion along our routes."

WILLIAM J. QUINN, President
Chicago, Milwaukee, St. Paul & Pacific R. R. Co.

In 1948 the Milwaukee Road took a parallel step with the launching of a 10-year plan of Dieselization. That this program was sound is evidenced by the fact that it was completed three years ahead of schedule. Spearheaded by General Motors Diesels, the Milwaukee was the first road completely Dieselized in the Pacific Northwest.

ELECTRO-MOTIVE DIVISION · GENERAL MOTORS
LA GRANGE, ILLINOIS · *Home of the Diesel Locomotive*
In Canada: General Motors Diesel Limited, London, Ontario



One of the 1,500 new C. B. & Q. boxcars being equipped with N-S-F at the road's Havelock, Nebraska shops.

N-S-F® helps Burlington Route GO MODERN all the way

The smartly modern boxcars of the Burlington are painted in Chinese red, with black trucks. The lettering and border of the famous Burlington trademark are reflective for improved visibility.

N-S-F is a registered trademark of Stran-Steel Corp.

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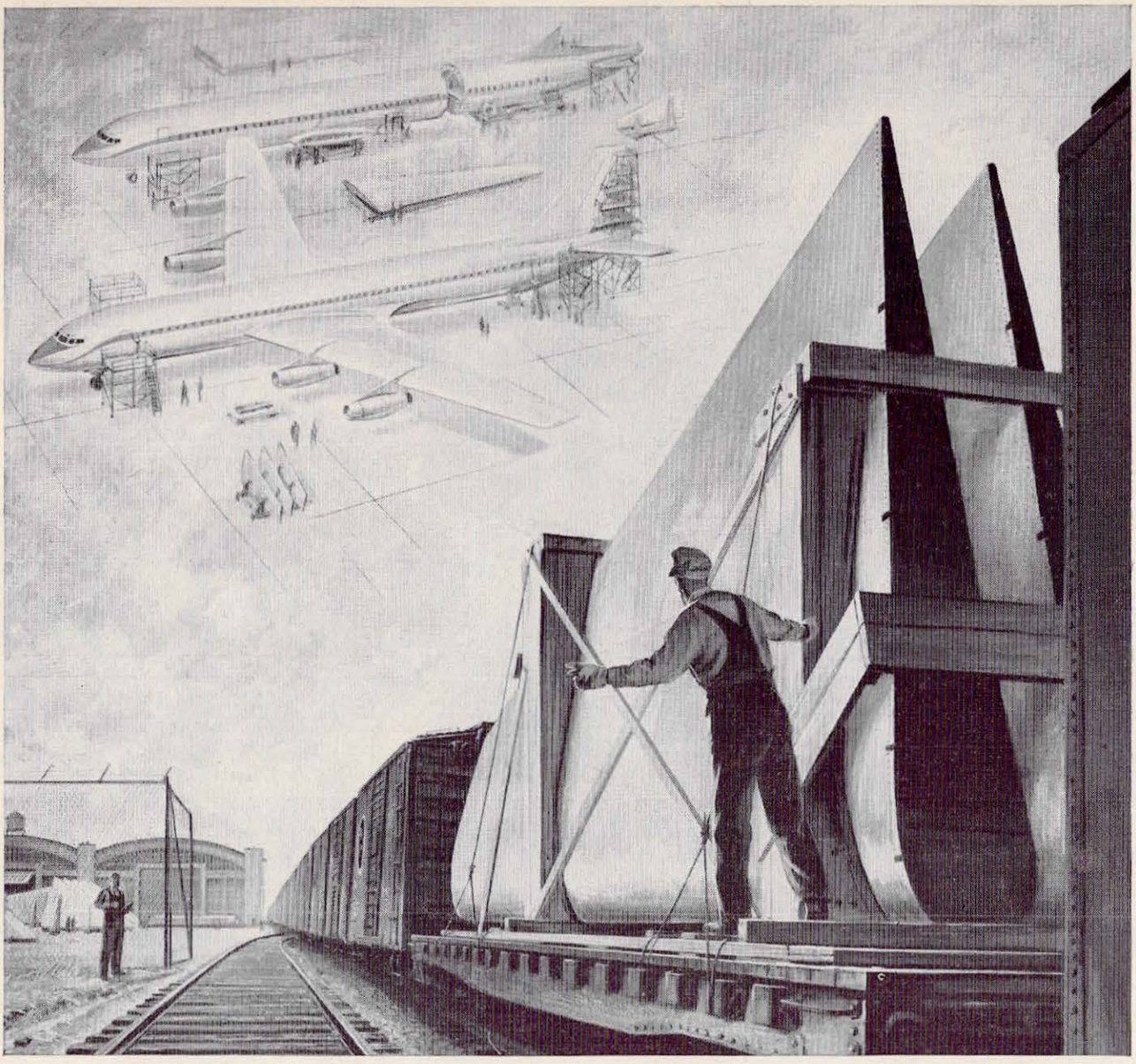


America's jet age rolls in on rails of steel

Another example of how railroad progress goes hand in hand with U. S. progress

New York to London in only 6½ hours! That's the flying time of today's dramatic new jet planes—as America advances into the jet age.

Assembling jet planes – from raw material to finished product – calls for a massive job of hauling. So naturally, the builders turn to the railroads. For no other form of transportation can move such huge quantities of materials with the efficiency and economy of the railroads.

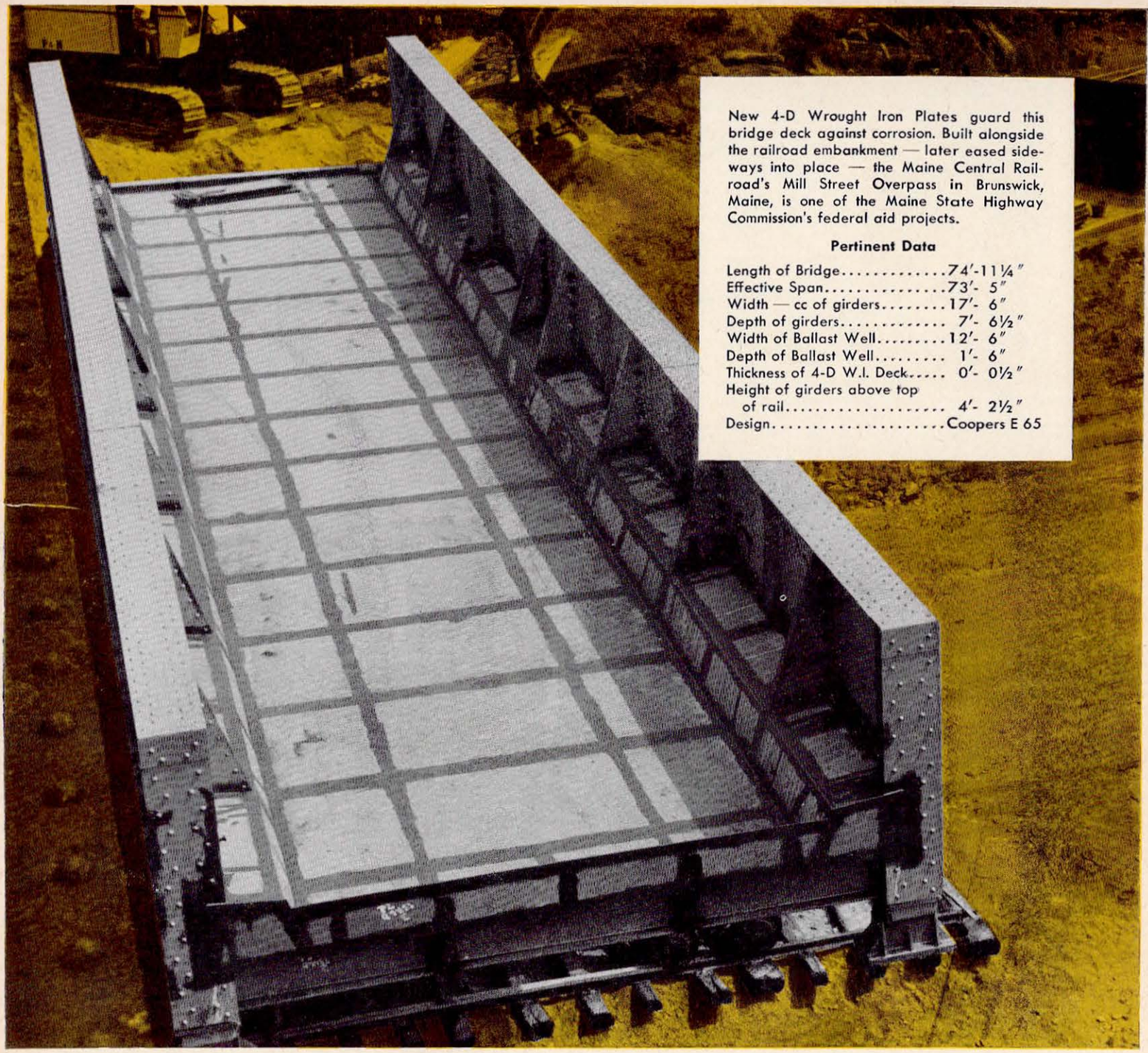
In fact, the railroads are absolutely essential to the growth of our economy and to our national defense. The country couldn't do without them. That's why the railroads should be allowed equality of treatment and opportunity with their competitors.

RAILROAD PROGRESS: *Push-button control of hundreds of miles of track increases the efficiency and capacity, and improves the service of today's modern railroads.*

AMERICA MOVES AHEAD WITH THE RAILROADS

Association of American Railroads, Washington, D. C.

ESSENTIAL TO THE NATION'S ECONOMY



New 4-D Wrought Iron Plates guard this bridge deck against corrosion. Built alongside the railroad embankment — later eased sideways into place — the Maine Central Railroad's Mill Street Overpass in Brunswick, Maine, is one of the Maine State Highway Commission's federal aid projects.

Pertinent Data

Length of Bridge	74'-11¼"
Effective Span	73'- 5"
Width — cc of girders	17'- 6"
Depth of girders	7'- 6½"
Width of Ballast Well	12'- 6"
Depth of Ballast Well	1'- 6"
Thickness of 4-D W.I. Deck	0'- 0½"
Height of girders above top of rail	4'- 2½"
Design	Coopers E 65

4-D Wrought Iron bridge deck plates discourage corrosion — permit shallow floor depth design

The Maine Central realizes a number of advantages using ballast bridges with 4-D Wrought Iron deck plates. On their recently completed Mill Street Overpass, this type of construction permitted reduction of floor depth to a minimum.

4-D Wrought Iron's unique composition — glasslike iron silicate fibers entrained in a pure base metal — makes it extremely corrosion-resistant. It can withstand considerable fatigue stresses. Moreover, its self-fluxing properties enable welders to produce sound welds with ease.

In applications like this, where plates are subject to vibration and severe corrosive attack from coal and refrigerator car drippings and run-off water, 4-D Wrought Iron is more than equal to the occasion. The use of this metal is all the more important because regular maintenance is so difficult in ballast construction.

These advantages account for the increasing trend to 4-D Wrought Iron deck plates in ballast bridges used in highway grade crossing eliminations.

4-D Wrought Iron serves successfully in a number of other railway applications. *Wrought Iron for Railroads* tells which ones and why. Write for a copy. A. M. Byers Company, Clark Building, Pittsburgh 22, Pennsylvania.

BYERS 4-D WROUGHT IRON

Corrosion costs you more than Wrought Iron

RAILWAY AGE *weekly* December 8, 1958 • Vol. 145, No. 23

Week at a Glance

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•

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Bankers back passenger subsidies ..... p. 9

The people who ride passenger trains will have to be subsidized if the service is to continue, says the Railroad Securities Committee of the Investment Bankers Association. Outside of the passenger field, the committee views the railroads' future with optimism, predicts a continuing railroad recovery.

Big power changes on the way p.14

How the U. S. meets its increasing power requirements in the next quarter-century is bound to change long-existing transportation patterns. Railroads must anticipate the changes and take steps to meet them. What railroads can do to cope with the anticipated shifts in power requirements is suggested by Dr. Robert H. Smith, a railroad economist specializing in transport and energy research.

How NYC film helps tell the railroad story p.18

The public reaction to the film, which was shown in New York's Grand Central Terminal, amazed NYC officers. The reaction proves the public is interested in railroads. Maybe the idea is something other railroads could use to help win the always crucial battle for public opinion.

'Painless' wage hike formula? p.28

Canada's Transport Commissioners apply a "look ahead" theory in deciding that anticipated labor costs can be a legitimate factor in setting freight rates.

One car for commuters and cargo? p.38

That's Northwestern University Professor Berge's solution to the thorny problem of commuter car utilization. He proposes hybrid cars with collapsible seats and removable cargo fasteners. They would carry commuters during rush hours, and merchandise, mail and express during off-peak daylight hours and at night.

The Action Page — What rates for competition? p.44

Few businesses experimenting with new prices expect to "get their bait back" the first day the prices go into effect. Any industry that wants to progress must take reasonable risks. If railroads can't hazard anything in making business-building rates, they're going to have a tough time competing.

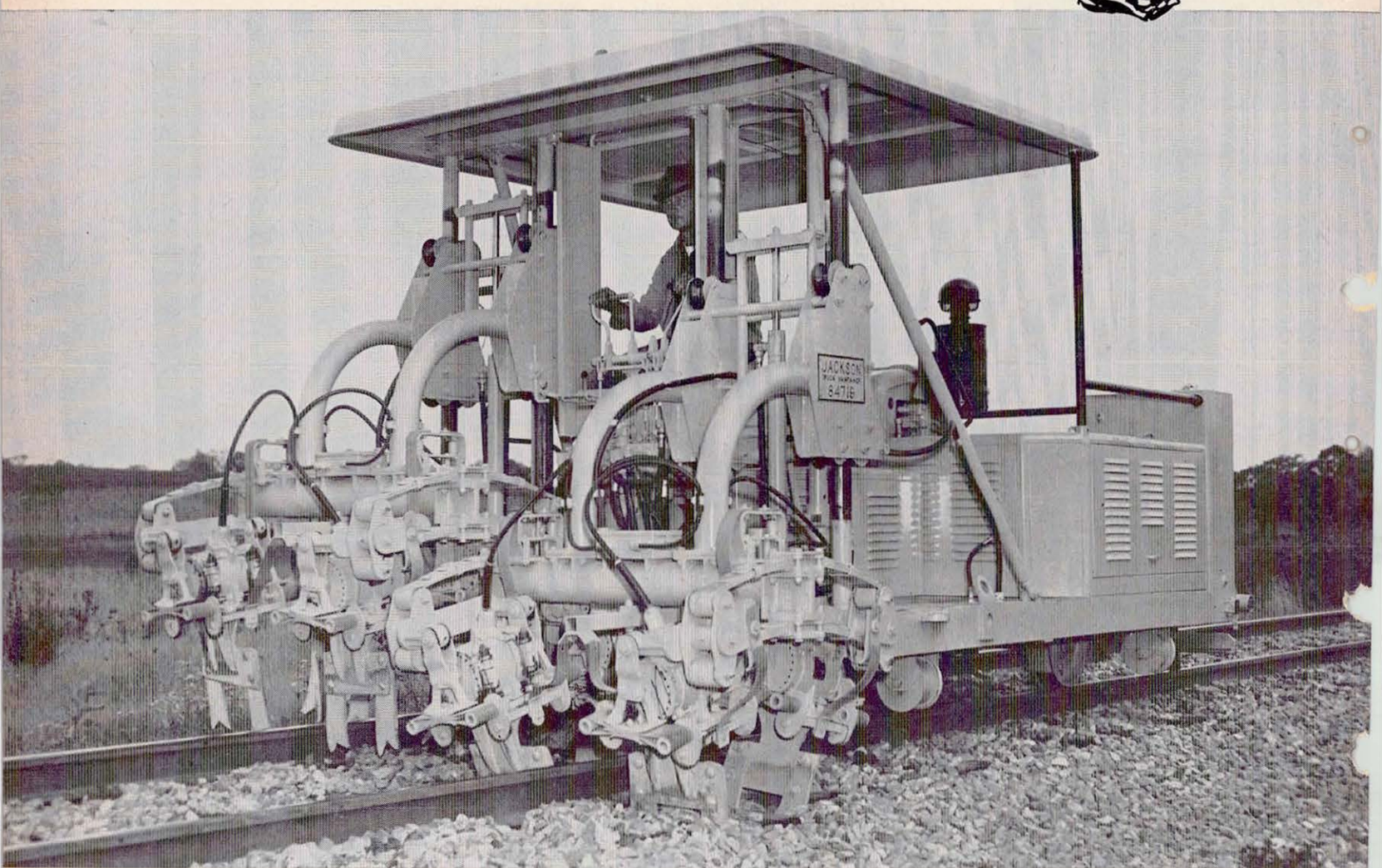
Short and Significant

October's net income of Class I railroads . . .

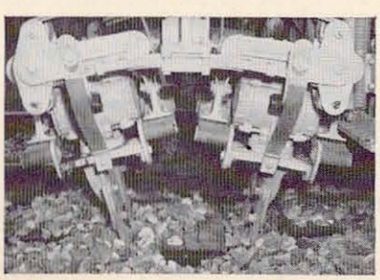
is estimated at $97,000,000—up $16,000,000 from October 1957's $81,000,000. Net railway operating incomes for the months were

UNMISTAKABLY

THE CHAMP FOR '59



Perfect consolidation of ballast right under the rail and from end of tie to specified distance inside the rail.



As its record on dozens of leading railroads clearly indicates, the **JACKSON TRACK MAINTAINER** has had no close rival in its dual function of quality production tamping and maintaining track of finest characteristics under all conditions. Now, with much more powerful tamping motors, more speed, a simplified power plant of more than ample capacity and other refinements, it increases that wide margin of superiority which lead to its adoption by the great majority of American railway systems.

Write, wire or phone for the facts and you, too, will recognize the JACKSON MAINTAINER as unmistakably the CHAMP FOR 1959.

JACKSON VIBRATORS INC.

LUDINGTON **MICHIGAN**

Week at a Glance CONT.

Current Statistics

Operating revenues, nine months	
1958	$7,012,303,984
1957	7,920,664,893
Operating expenses, nine months	
1958	5,612,987,864
1957	6,188,806,448
Taxes, nine months	
1958	686,238,403
1957	828,306,291
Net railway operating income, nine months	
1958	487,759,288
1957	699,669,837
Net income estimated eight months	
1958	354,000,000
1957	540,000,000
Average price 20 railroad stocks	
Dec. 2, 1958	102.86
Dec. 3, 1957	66.59
Carloadings revenue freight	
Forty-seven weeks, 1958	27,481,115
Forty-seven weeks, 1957	32,725,538
Average daily freight car surplus	
Wk. ended Nov. 29, 1958	24,982
Wk. ended Nov. 30, 1957	28,503
Average daily freight car shortage	
Wk. ended Nov. 29, 1958	620
Wk. ended Nov. 30, 1957	139
Freight cars on order	
November 1, 1958	23,670
November 1, 1957	65,718
Freight cars delivered	
Ten months, 1958	36,255
Ten months, 1957	84,639

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POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

$114,687,960 and $99,735,398, respectively. For this year's first 10 months, the estimated net income was $450,000,000 and the net railway operating income was $602,964,606. They compared, in turn, with 1957 figures of $620,000,000 and $799,405,232. Twenty Class I roads failed to earn their fixed charges in this year's first ten months. Rate of return for the 12 months ended with October averaged 2.63 per cent, compared with 3.55 per cent in the previous 12 months.

Guaranteed loan of $10,500,000 . . .

is sought by the Boston & Maine. Its application, under provisions of the 1958 Transportation Act, has been filed with the ICC. Proceeds would reimburse its treasury for capital expenditures made between Jan. 1, 1957, and Sept. 30, 1958.

End all transport subsidies . . .

because "there is no longer any need or justification for any of our major carriers failing to pay its own way all the way." This call came last week from AAR President Daniel P. Loomis, who urged a close look at government transportation promotion in view of the projected federal budget deficit of $12 billion this fiscal year. America today has "a magnificent transportation team, whose every member has long since grown to maturity," the AAR president told the Birmingham, Ala., Traffic Club. (See "Watching Washington," p. 10)

A substantial hike in airmail subsidies . . .

is predicted by the Civil Aeronautics Board. CAB estimates that airmail subsidies in the next fiscal year will amount to $61,786,000—an increase of $10,455,000 over this year. In addition, the airlines will get $77,806,000 in the fiscal year beginning July 1, 1959, for the actual costs of carrying the mail.

A way out of the dilemma . . .

created by Canada's Crow's Nest Pass grain rates has been suggested by the Canadian Industrial Traffic League in a Nov. 26 letter to the Minister of Transport. The special rates were fixed by Parliament in 1897; haven't been changed since; account today for 32% of all Canadian rail traffic, only 11% of revenues. Result is to "burden . . . general users of carrier services." Answer, says the CITL, is to have the cost of special treatment borne by the country as a whole by paying to the railroads out of the national treasury "the difference between statutory rates and normal reasonable rates."

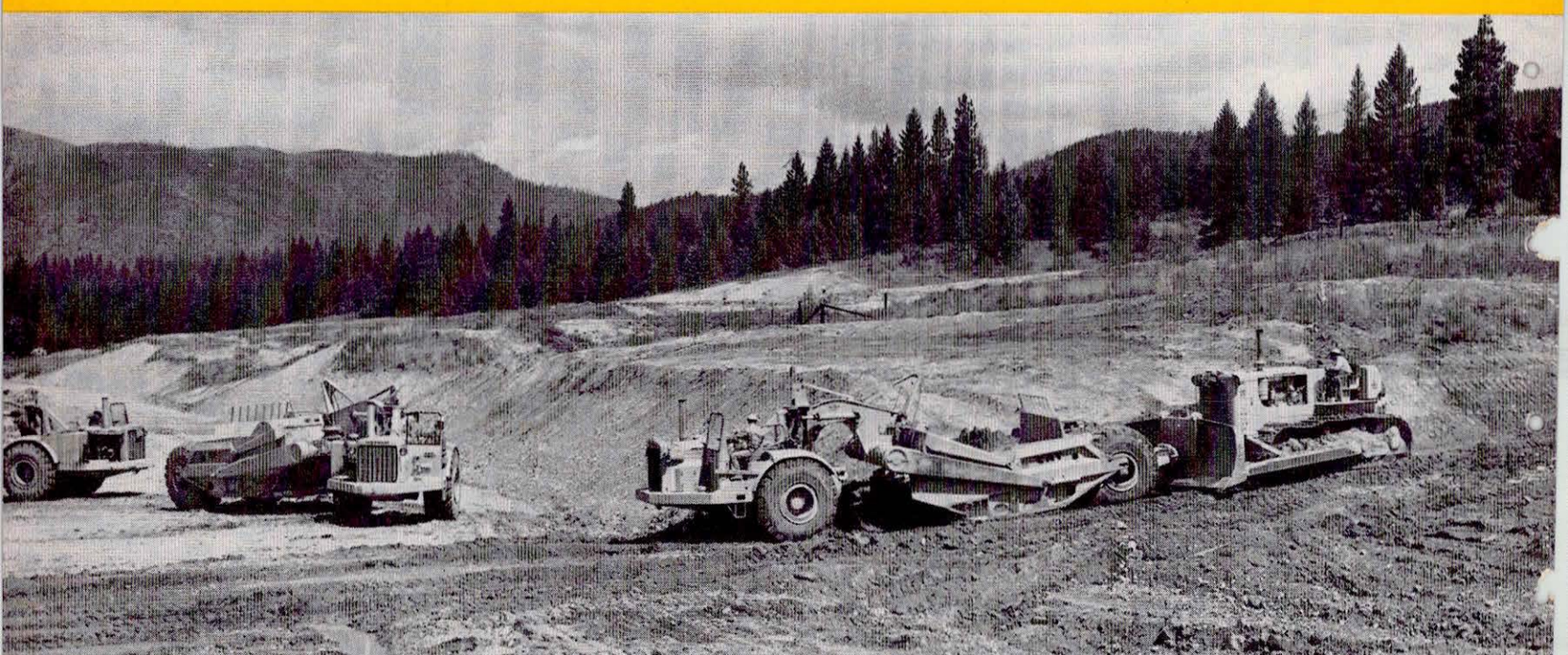
The business upturn looks real . . .

in the Ohio Valley Transportation Advisory Board's area. For the first time in more than a year, the Board is forecasting increased carloadings—up 5.3 per cent in the first quarter 1959 compared to the same period in '58. Most significant increase predicted: a 5.8 per cent gain in coal-coke loadings.

JOB: Move 1½ million cu. yd. for the Northern Pacific

WHEELED EQUIPMENT: 3 DW21s

RESULT: "We're on schedule because the DW21s have plenty of power and traction. They maneuver better than anything their size." Hugh G. King, President, Bud King Construction Co., Missoula, Montana



Big, fast-moving Cat DW21 wheel Tractors look their best on the tough jobs. This is one. Bud King Construction is moving 1½ million cu. yd. to relocate 19.5 miles of Northern Pacific line in Montana. When the job started, equipment was half under mud. Excavation included everything from rock to clay.

"I like the traction and flotation of the DW21s on this soft ground," says Mr. King. "We had them on clay slopes where any other machine would have either bogged down or been too awkward to handle."

And here's important news. Now the Caterpillar DW21 is even more powerful, efficient and productive. There's a new 320 HP (maximum output) Super-Turbo Engine in the new model (Series D). This engine has excellent torque characteristics—resulting in rapid acceleration and good gradeability. And the DW21 hits top speed of 22.6 MPH quickly. Matched with the Caterpillar No. 470 LOWBOWL Scraper, the unit loads to its rating fast—18 cu. yd. struck, 25 heaped.

This is important new economy and production for the big, tough off-track jobs. Have your Caterpillar Dealer give you an eye-opening demonstration of the new DW21 on your next job. It's so fast, strong and efficient, it has to be seen in action to be believed.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

FIND YOUR CATERPILLAR DEALER IN THE YELLOW PAGES

CATERPILLAR

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SUPER-TURBO ENGINE
—First in the Industry
—First in Performance

Bankers Back Passenger Subsidies

Investment Bankers Association committee says travelers using rails will have to be subsidized if service is to continue. Wall Streeters "optimistic" for continuing railroad recovery, cite gains in rail securities.

► The Story at a Glance: The Railroad Securities Committee of the Investment Bankers Association of America last week endorsed subsidies for "the traveling public" using railroads.

In a report submitted at the IBA's 47th annual convention in Miami Beach, the committee also:

- **Reported a strong recovery of railroad stocks in Wall Street.**
- **Predicted that the current traffic upswing "will continue well into 1959."**
- **Urged the Interstate Commerce Commission to be "realistic" in considering competitive rate adjustments requested by railroads.**
- **Praised the railroads for their efforts to eliminate "economic waste"—noting, with approval, the increasing merger activity in the industry.**

In its endorsement of railroad passenger subsidies, the IBA's Railroad Securities Committee made it clear that it was advocating the subsidization of the travelers themselves—not the railroads that provide passenger service at a loss.

"If the public interest requires the railroads to provide passenger service, and your committee believes it does, then the traveling public using this mode of transportation must be subsidized," said the report.

The committee said it would not "suggest the form and extent of such a subsidy," but added:

"It is noteworthy that the New Haven Railroad last summer entered into an arrangement with various municipalities in its service area in the vicinity of Boston whereby it will receive over a period of a year from the municipalities a sum of $900,000 for the purpose of maintaining service. Similarly, the Pennsylvania and Reading Railroads more recently agreed with the City of Philadelphia to provide certain passenger train service under conditions that involved the city paying to these companies, over a period of a year, sums totaling $165,000."

The committee, which is composed of leading security analysts, took a solidly optimistic view of the railroads' future.

"Railroad stock prices have vigorously recovered from their lows reached last January," the committee reported, "and the averages are now up more than 50 per cent. Many railroad common stocks are close to or recently surpassed the highest prices at which they sold in the 1956-57 period. Does this enthusiasm for rail equities portend a new horizon for the rail industry? There is much reason to be optimistic, based on what has already transpired this year, as well as what is in the offing, wholly apart from the excellent traffic outlook both near term and long term."

The committee noted that the railroad traffic decline "was arrested towards the end of April 1958."

"Although not quite back to the 1957 level, carloadings have, for the last several months, shown a tendency to improve and there is every indication that the business recovery now taking place will continue well into 1959."

The committee reported that the market for railroad mortgage bonds is still poor. It pointed to a "paradoxical situation" which it said has resulted from the industry's continuing need for new capital funds each year:

"Management, having limited or no access to capital markets other than for equipment (and in certain instances even this money was unavailable), is compelled to penalize stockholders to obtain funds for modernization and improvements. Since most roads are unable to sell any appreciable amount of mortgage bonds,

Containers for Rail, Water, Road

Seatrain Lines, which for 30 years has operated a non-break-bulk rail-water service between New York and Gulf ports, is expanding into containers. The new containers, presently used only in terminal-to-terminal operations between ports, are loaded twice weekly for movement between New York and Texas City. Twenty-seven feet long, eight feet wide and seven and a half feet high, the new containers have been designed with an eye on possible extension of service outside present port limits. Door-to-door pick up and delivery off rail sidings, plus economy of rail-water rates, is expected to give Seamobile a competitive advantage in bidding for shipments.

the outstanding mortgage bonds are constantly being strengthened by the additional property investment placed behind them and paid for out of retained earnings."

The committee saw, in the 1958 Transportation Act, long-range hope for a strengthened credit position. Pinpointing that provision of the act which specifies that "rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation," the committee went on to say:

"This section of the act has caused concern in certain quarters lest the Interstate Commerce Commission misinterpret the intent of Congress. It is too early to say whether these fears are well founded, but it is hoped the Commission will be realistic in considering requests for competitive rate adjustments. In the opinion of your committee, a regulatory policy for transportation rates, which gives the carriers freedom to make competitive but compensatory rates, would be a most effective step toward improving the credit base of the industry."

The committee was impressed with the efforts of the railroads to improve their earnings position and eliminate waste, commenting:

"Rail management can be relied on to continue its great work, and evidence of management's desire to greatly strengthen the position of the industry is found in the current series of studies being made of possible mergers and coordination of facilities."

Members of the committee which drew up the report are Alfred J. Ross, chairman, of Dick & Merle-Smith; Charles L. Bergmann, R. W. Pressprich & Co.; James H. Carson, Salomon Bros. & Hutzler; Gustave L. Levy, Goldman, Sachs & Co.; Eugene Treuhold, L. F. Rothschild & Co.; W. Wendell Reuss, W. E. Hutton & Co.; and James L. Sheehan, Dick & Merle-Smith.

Watching Washington *with Walter Taft*

• **CALL FOR REEXAMINATION** of the railroad retirement and unemployment insurance systems will be before the next Congress as part of the industry's legislative program. It will be management's counter-proposal to the drive for liberalized benefits which railroad labor organizations will renew. The labor leaders are meeting in Washington this week to formulate plans for the drive.

THE MANAGEMENT RECOMMENDATIONS have not been worked out in detail. Generally, they are to be based on studies of the system's growing costs in relation to costs of the general social security system. There will also be other studies to determine whether the more liberal benefits are worth their prices.

RETIREMENT SYSTEM TAXES are about three times the social security levies, but maximum benefits are only about 71 per cent more. The unemployment insurance system requires railroads to support minimum benefits ranging from about 125 per cent to 675 per cent greater than minima paid to unemployed of other industries which are under state systems.

A BENEFIT LIBERALIZER sponsored by the railroad unions nearly got through Congress this year. The renewed drive for similar or more liberal legislation will get under way early in the next session. Riding on the reexamination proposal will be management's hope of minimizing the threatened increase in costs.

• **TALK OF INCONSISTENCY** is entering discussions of the railroad industry's position on subsidies and its call for more freedom to diversify by operating in other fields of transport. It is pointed out that, while the industry wants to end the subsidization of its competitors, some roads are advocating government support of commutation or other unprofitable passenger services. Also raised is a question of whether the call for freedom to diversify is consistent with advocacy of adequate user charges on publicly-provided transport facilities.

THE ANSWERS are easy. Railroads advocating government aid for their burdensome passenger services are offering the alternative of abandonment. They're not asking to be sustained in an unprofitable business. They're willing to get out of the business, if interested communities prefer it that way. As to the diversification-user charge situation, railroads have always expressed willingness to pay adequate charges for whatever use they make of public facilities. Many roads already have substantial, though restricted, trucking operations, but this has not toned down their call for an end to subsidies in the highway field.

Nationalization?

Railroads' lack of capital poses threat, says Major.

"If it develops that the only way we can raise the money to provide adequate railroad service is by having the government take over the railroads, then the government should take them over." So said President Cedric Major of the Lehigh Valley at a Dec. 1 luncheon meeting attended by representatives of governmental authorities and newspapers from communities served by the railroad.

Mr. Major called the New York meeting to discuss the railroad's plan to seek ICC authority to withdraw entirely from passenger service. This permission, he said, will be asked for "in about ten days."

Mr. Major did not, of course, advocate nationalization—but indicated that such an outcome would follow if conditions made it impossible for private capital to render indispensable service. He made his statement in reply to a questioner who asserted that such a city as New York could not exist without railroad passenger service.

The LV chief executive made it clear that he did not consider the passenger service provided by his company to be a vital factor in the life of the communities the railroad serves. He pointed out that alternative services on frequent schedules are provided in most of the territory by other railroads—and by plane and bus lines. Mr. Major said there are two courses open to the LV: (1) to become a "good freight railroad" or (2) to try to provide both freight and passenger service, as it is now doing, and see its entire operation—freight as well as passenger—become obsolete and inadequate.

"If we had the dollars, we'd love to run the passenger trains," Mr. Major went on to explain. But he sees no alternative but to abandon the service—public policy of providing free and untaxed facilities for other forms of transportation being what it is. Passengers carried have declined from 2,500,000 in 1946 to approximately 650,000 in the current year. Gross passenger revenue (including mail and express) will total approximately $4,000,000 during the current year, while expense of providing the service will total $8,000,000.

Impending replacement costs hastened LV's decision, Mr. Major said.

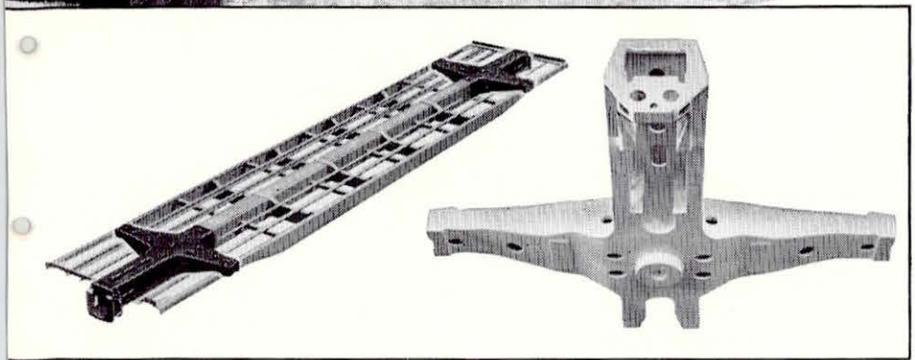
Where railroad progress is cast in steel....

Many Great Northern Box Cars roll across America's road beds—equipped with General Steel one-piece underframe ends that assure dependable, long-life service.

For over 50 years, General Steel has proved its unequaled ability to extend the life of railroad equipment through the application of cast steel products.

General Steel engineering utilizes the great strength and minimum weight of one-piece steel castings... together with their extra ruggedness and freedom from maintenance... to cut operating expenses for rail and industrial users the world over.

An investment in General Steel products today means a more profitable future.



Underframes with one-piece cast steel ends provide great strength, eliminate body bolster failures, resist rust and corrosion and simplify car construction or rebuilding.

General Steel underframe ends provide the following features for new or rebuilt cars: integral body bolsters, draft gear stops, strikers, coupler carriers, center fillers, center plates and side bearing pads.

GENERAL STEEL CASTINGS

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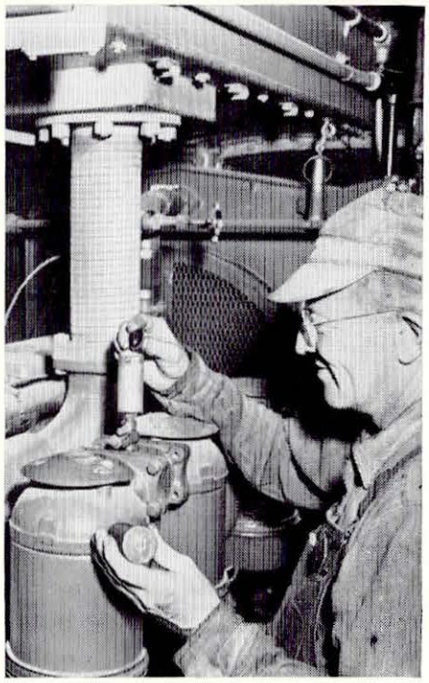
The Engineer's Field Report

CASE HISTORY

PRODUCT Chevron Starting Fluid

FIRM Great Northern Railway Havre, Montana

Special fluid starts 250-ton crane instantly, saves time in emergencies—even at 50° below

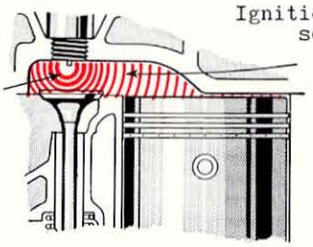


GREAT NORTHERN RAILWAY'S 250-TON, RAILROAD CRANE (above) starts instantly with Chevron Starting Fluid in temperatures ranging to 50° below zero—even after standing idle for months at a time. Former steam-powered wrecker equipment took crew 12 hours to start. This crane with its two 174 h.p. Cummins diesel engines is now available for derailment emergencies on short notice.

"Slow-grind starts on battery power alone waste too much valuable time. Chevron Starting Fluid fires these engines 'right now'—in any weather." A Great Northern engineer shows how simple it is to insert 7CC gelatin capsule of Chevron Starting Fluid in unit's air-intake system. Fluid is also available in 17CC capsules and 1-pint cans.

Why Chevron Starting Fluid starts engines instantly

Highly volatile: 7 times more than gasoline



Ignition temperature several hundred degrees lower than diesel fuel

Contains wear-reducing lubricants

Additives inhibit ice formation

CHEVRON

FREE FOLDERS tell more about the Chevron Starting Fluid and Chevron Pressure Primer System. Write or ask for them.

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National Rubber Draft Gears are used to provide a high degree of impact protection for freight cars on the Southern Railway System. In addition, the Southern's large Diesel road locomotives also use National Rubber Draft Gears to protect car and locomotive structures.

In fact, today there are more than 30,000 carsets of National Rubber Draft Gears in service on America's railroads — many with service records of over 8 years and hundreds of thousands of maintenance-free miles.

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Big Power Changes on the Way—

The future demand for all types of energy in the United States warrants careful study by the railroad industry. It could be the thing that will keep them in business 25 years hence. Or it could put them out of business.

How the country obtains its increasing power requirements in the next two or three decades is certain to produce marked changes in long-existing transportation patterns. New sources of power, shifting distribution methods, changing markets—all this is already indicated.

Unless railroads anticipate these changes, and move to meet them, present competitive stresses are sure to increase. The effect on bituminous coal, for example, could be far reaching.

The following article, by Dr. Robert H. Smith, a railroad economist who specializes in transport and energy research, outlines what could happen. More important, he suggests some positive steps railroads need to consider today.

The prospect of achieving economic nuclear power has stimulated renewed study of the future demand for all types of energy in the United States.

Most such studies conclude that the demand for energy is likely to double over the quarter-century from 1955 to 1980.

The demand for electric power, of particular importance to railroads, is expected to triple. Coal, which provides the greater portion of that energy, is likely to account for a smaller share of the market, but its consumption should increase by 65 per cent.

From such projections as these it would appear that railroads, particularly in the East, can look forward to continuous prosperity in the transportation of bituminous coal. But first looks can be misleading.

The history of railroads in the development of energy transportation over the past three decades has been the story of a loss of old markets and small gain from new ones. Oil and natural gas are replacing anthracite coal in the heating market; bituminous coal lost out to oil as a railroad fuel. At the same time, rail participation in transporting the more than one billion gallons of fuel oil consumed each year is painfully small.

There now arises real danger that the rails may face a similar prospect in the electric energy market—and with serious consequences. Tremendous prospective growth in the demand for electric power guarantees no *automatic* prosperity for the railroads.

The position which railroads will occupy in the transportation of coal for power two decades hence may hinge largely upon actions they take in the next few years.

The shadow of the problem they face is discernible. But it is difficult to portray it with conclusive statistics. Railroads are, in effect, twice removed from the demand for power. Their role depends, first, upon the position of bituminous coal as a fuel in competition with oil and natural gas for power generation; second, upon the cost of transporting coal or energy by rail as compared to the cost by barge, truck, pipeline or high-voltage transmission.

Share-of-the-market projections for each of the types of fuel cited above imply that oil and gas prices will rise more rapidly than the price of coal over the next two decades. So the crucial question becomes one of cost—transporting coal or its energy equivalent by rail as compared to the cost of alternative means. There are some statistics on this question which provide some insight into the problem of the railroads in sharing profitably in the expanding energy market.

The current situation of the railroads is portrayed by Bureau of Mines data, which indicate that between 1933 and 1956 the proportion of bituminous coal transported by rail, exclusive of that consumed by railroads, declined from 85 to 70 per cent of total output. A more recent tabulation, on the method of distribution of bituminous coal in 1957, indicates that of the total movement of 493.9 million tons only 225.7 or 46 per cent moved from mine to destination *entirely* by rail.

That this should be the case is evident from the trend, for example, in the electric utility industry.

A study by a leading public utility consulting firm in 1957 listed sixty-three steam electric power plants in service or scheduled for completion by the end of 1960 which were either at or near the mine mouth; near coal fields with facilities to cut down transportation of fuel under standard rail rates; or some distance from producing coal fields and receiving all or a substantial part of their fuel requirements via navigable waterways.

This phenomenon is understandable in the light of the importance of fuel cost in the total cost of producing electric power.

A sample of 102 coal-burning power plants analyzed by the same consulting firm indicated that the cost of fuel accounted for three-quarters of their combined production expenses. Of this fuel expense, nearly half represented the transportation of the raw fuel. This fact accounts not only for the relocation of plants and the use of trucks and barges but also for the increasing research activity in high-voltage transmission, improvements in thermal efficiency, and the development of pipeline transportation of bituminous coal. Such developments, of course, are aimed at the rail share of the coal transportation market.

Statistics on the comparative costs or rates of rail, barge, truck or pipeline transportation of coal or transmission of its energy equivalent are sketchy, but such data as are available pose real problems for the railroads as they view their prospects in the transportation of fuel for power. For example, of the electric energy to be generated from coal by 1975, it has been estimated that about 78 per cent will be required in areas within two hundred air miles from the center of a county that is presently a large producer of coal, and that 92 per cent will be required in areas within three hundred miles.

It is in the distances under three hundred miles, of course, that the rails have faced their most severe competition in the transportation of commodities other than bituminous coal. Thus the competition in

Are the Railroads Prepared for Them?

U.S. ENERGY SOURCES*

	1955		1980	
	UNITS	PERCENT OF MARKET	UNITS	PERCENT OF MARKET
Coal (million tons)	447	29%	735	23.7%
Liquid Petroleum (billion barrels)	2.8	40.5%	5.8	41.5%
Wet Natural Gas (trillion cubic feet)	10.1	27%	17.4	23.1%
Hydro Power (billion kwh)	120	3.5%	271	3.0%
Atomic Power				8.7%

*Source: Nuclear Energy and the U.S. Fuel Economy, Washington, D.C., National Planning Association, 1958

HOW WILL RAILROADS be affected by future U.S. demands for all types of energy? Chart shows that coal consumption should increase, although its share of the market will decrease sharply.

coal transport is, in effect, an important and growing segment of a much larger problem.

As an illustration of the economics of this competition, consider the price of moving coal by rail as compared to the cost by alternative methods. In Official Territory in 1956, the average revenue per short-line ton-mile for the transportation of bituminous coal in the mileage block starting at 100 miles was 1.8 cents.

Keeping this figure in mind, look at the projected cost of moving coal by pipeline. The 108-mile coal pipeline from Georgetown to Eastlake, Ohio, will cost about $13,500,000. The contract based upon the original design capacity called for delivery of 18 million tons of coal over 15 years. This would result in a capital cost of 7.5 mills per ton or 7 mills per ton-mile. To this should be added an annual operating cost estimated at approximately $800,000 per year or another seven mills per ton-mile, which brings the total cost per ton-mile to 1.4 cents.

It doesn't usually pay to minimize a competitor's potential. The cost of 1.4 cents may be low because the current throughput is above the amount originally anticipated; the pipeline gives evidence of having a useful life considerably in excess of 15 years; and possibly other pipelines could be constructed and operated more cheaply with the knowledge gained from the existing line.

How do the costs of transporting coal by other alternative means compare with rates for rail transportation?

- At the upper end of the cost curve is the truck cost, which is approximately 2.5 cents per loaded ton-mile for a 100-mile haul from mines in Western Pennsylvania to Cleveland.
- It has been estimated that the transmission of electric power over a 100-mile line of optimum design at a 90% load factor would result in a coal equivalent cost of approximately 1.65 cents per straight line mile.
- At the low end of the cost curve is barge transportation which for a distance of 100 miles on the Ohio River has been estimated at as little as one mill per ton-mile under optimum conditions where the barge is loaded in both directions and three to five mills for a one-way load.

If these figures are truly representative, the expense to the utility of hauling coal one hundred miles by rail would be below the cost of truck transportation but above the transmission line, pipeline or barge.

The conclusion that rails are at a competitive disadvantage in the transportation of bituminous coal cannot be accepted merely on the basis of such statistics. The cost of electric power transmission and truck transportation increases disproportionately with distance because of line losses in the case of transmission and the length of the empty return trip in the case of truck transportation. The rails would compare more favorably to truck and power line over distances of 200 to 300 miles which are more representative of the length of haul which will be required. On the other hand, both the coal pipeline and transmission line can follow a more or less direct route from source to market, while the railroads, particularly in the coal mining territory, are circuitous. And the coal pipeline has the advantage that its capacity can be increased to lower the unit cost if markets can be found.

The point of the comparison, however, is to suggest that the growth of energy demands, and particularly for electric power, over the next 25 years does not automatically guarantee the railroads a profitable and steadily growing bituminous coal traffic. An increase in the rail share of the energy transportation market can come only as the result of aggressive competition with alternative forms of transportation.

A study of 143 electric utility plants constructed since 1945 indicates their average size is approximately 150 megawatts, and when the additions for which provision has been made are completed it will probably rise to 250 megawatts. A 250 megawatt plant operating over a 30-year period at an average plant factor of 50 per cent would consume 500,000 tons of coal per year. At an average revenue per ton-mile of 1.5 cents for an average haul of 200 miles, the location of such a plant on a railroad would provide $1,500,000 per year in gross revenues.

To look at it from another viewpoint, the sixty-three plants mentioned above as located away from the rails have a capacity of 25.2 thousand megawatts. If they were to utilize only bituminous coal and operate at a 50 per cent plant factor they would consume fifty million tons of coal per year. Of course, in many instances the location of the market would result in the off-rail location of the plant regardless of rates or service, but greater attention to this competitive situation might often retain such traffic for the rails.

In the light of existing competition from alternative forms of transportation, as well as from the development of economic nuclear power, what action can railroads take to turn the rising tide of energy demand to their advantage? The answers appear to lie along four lines—improvements in service, changes in pricing policy, diversification and research.

Service: Railroads are forbidden by law to engage in price discrimination. In other industries where price competition has been eliminated (i.e., the "administered-price" industries) competition occurs on the basis of product or service differentiation. In the railroad industry service differentials can be based upon the eco-

nomics of rail operations. Electric utilities and steel plants, the rails' largest coal customers, require large quantities of coal under long-term contracts delivered at regular intervals. These requirements should permit railroads to move bituminous coal in trainload lots on regular schedules with high equipment utilization and a minimum of classification and other handling. If shippers would cooperate with railroads in reducing rail handling costs, part of such savings to accrue to shippers, it may well be possible to get the costs of rail service more effectively competitive with alternative means of transport.

Auxiliary Services

In addition to such improvements in primary service, the rails might intensify their activity in providing such auxiliary services as plant location studies, technical assistance to the coal industry to develop low cost coal sources, and assistance to rail customers in fuel analysis and the location of suitable fuel sources.

Rates: Although some progress is currently being made, rail rates are not yet thoroughly adapted to present day competitive economics. Electric utilities are under the same prohibitions with respect to price discrimination as are the rails. But they have long realized the difference between price "discrimination" and rates based upon the inherent economies of providing large blocks of power under long-term contracts. The interpretation of the provision of the law against discrimination, as intended to mean that all shippers large and small, frequent and infrequent, dependable and occasional, must pay the same rate, results in another form of discrimination—discrimination against the large shipper and against the railroad as a form of transportation.

Because the uniform price for both large and small shippers flies in the face of the economics of rail operation, it is truly discriminatory and must in the long-run have serious consequences. The rails would do well to consider seeking permission of the regulatory agencies to employ utility-type rates in the transportation of bituminous coal, based on reliable cost information.

Diversification: Major railroads, both in the East and West, have already entered both pipeline and truck transportation. In areas where barge competition is a serious threat, efforts to participate in combination rail-barge service, the use of rail rights-of-way for pipelines or electric power transmission lines, and the ownership of coal pipelines are among the possibilities. An example of a type of diversification is the proposed entry by one large Eastern railroad into the pipeline transportation of liquid petroleum gas, a growing new fuel market for the rails and one competitive with the truck or pipeline transport of gasoline.

Greatest Threat

Research: Over the long run the greatest threat to both the bituminous coal in-

(*Continued on page 22*)

Railroading After Hours with Jim Lynch

TRANSPORT SUMMER SCHOOL—I've just been looking over a booklet on the one-month summer Transportation Management Program of Stanford University, which looks to be tops from the standpoint of interest and practical content. This program is aimed, not just at railroad men, but at people from all forms of transportation. Started under Southern Pacific sponsorship, the program has attracted railroad men from a half-dozen different companies—a couple of them as far away as New England.

EVEN VS. STAGGERED JOINTS—I note that President John Budd of the Great Northern discussed the "even joints versus staggered joints" question in the laying of track—in our last week's issue (p. 32). He makes clear the point that even joints double the impact of the load on the understructure of the track—hence are impractical where traffic is heavy and fast, though the even joints simplify tracklaying.

Joint spacing and length of rail have a side effect that has nothing to do with engineering—they alter the rhythm of train-riding. Long rails and even joints (such as they have in Britain, for example) will fool the passenger accustomed to US trains into the belief that the train is just creeping along, when it isn't.

NO. 1 RAIL FAN?—Rogers Whitaker, of "New Yorker" magazine, could make a strong case for himself as the world's champion railroad fan. He tells me he has done 1,400,950 miles of travel by rail, and that he has ridden every single US passenger train listed in the Official Guide, including commuter and branch line runs.

WHERE LETTERPRESSES WENT—Walter Ayers, of the N&W chief engineer's office at Roanoke, has partially relieved my curiosity about what became of all the copying presses that used to be standard equipment around railroad stations and offices. He says he tried to locate one of these presses not long ago and found that, in his vicinity, those that remained had been contributed to scrap collections during the war. It's too bad if at least one hasn't been kept somewhere. These presses are an episode in the development of mechanical equipment for record-keeping purposes—as much so as the card punch and electronic computer.

A RULE 99 STORY—There was an investigation of a rear-end collision (reports E. L. Vlasak of Columbus, Neb.) at which the rear brakeman insisted that he had gone back to flag, exactly as he should have done. Repeated questioning failed to shake his testimony. After the hearing was over, the kindly superintendent who conducted the investigation got the brakeman aside.

"George," he said, "the hearing is all over and nothing is going to happen to you—but, honestly, were you really out flagging as you said?"

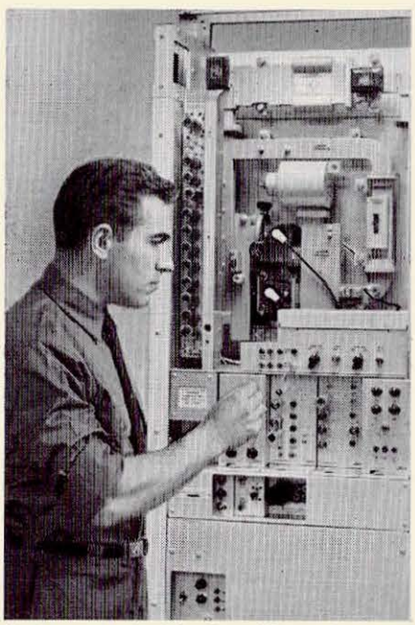
"Yes, boss," was the reply, "I was back there flagging all right—but I was scared to death somebody was going to ask me if my red lamp was lit."

WHAT A HOSE IS FOR—A couple of country boys went to railroading in the man-shortage days of the war (writes H. G. Murphy of Standard Railway Equipment at Hammond, Ind.) One was told to connect the airhoses (the purpose of which was not explained). The other was told to take a bucket and broom and scrub out the caboose.

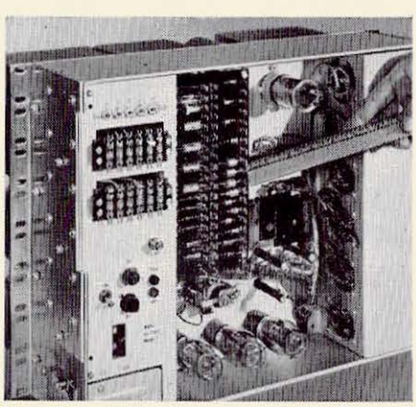
The hose-coupler went about his assignment, but a half-hour later the caboose scrubber was still idling. Asked why the delay, he said:

"I'm waiting for the engineer to turn the water into the hose my pal has been hooking up for me."

new Lenkurt **microtel** Type 74A planned for your growth!



Basic terminal of Lenkurt *Microtel* consisting of a transmitter, receiver and power supplies.



Power supply for the transmitting and receiving klystrons. The only active components in this supply are three voltage regulator tubes.

This new Lenkurt Type 74A system answers all point-to-point communications requirements. Operating in the high-frequency industrial band (Operational Fixed) from 6575 to 6875 megacycles, it is clean in design, reliable and highly flexible. With Lenkurt 45BX Carrier, a single terminal can accommodate from 4 to 240 channels, *over the one antenna system!*

Look at these important features:

- **Easy to install**—Standard 19-inch rack mounting; compact plug-in construction.
- **Easy to maintain**—Miniaturized plug-in components similar to Lenkurt 45-class equipment; all components accessible from front; built-in test facilities.
- **Less power consumption**—Fewer tubes; operates from standard battery supplies or from 115-volt a.c. mains.
- **Stand-by flexibility**—Frequency diversity or space diversity; combining or transfer facilities.
- **Economical expansion**—With r-f circulators 2, 3 or 4 terminals can be added to same antenna system.
- **Automatic switching**—Permits unattended operation; back-to-back terminal equipment permits dropping and reinserting of channel groups at repeater points.
- **System length**—Up to 300 miles with medium loading and multiple repeater points or considerably farther depending on specific requirements.

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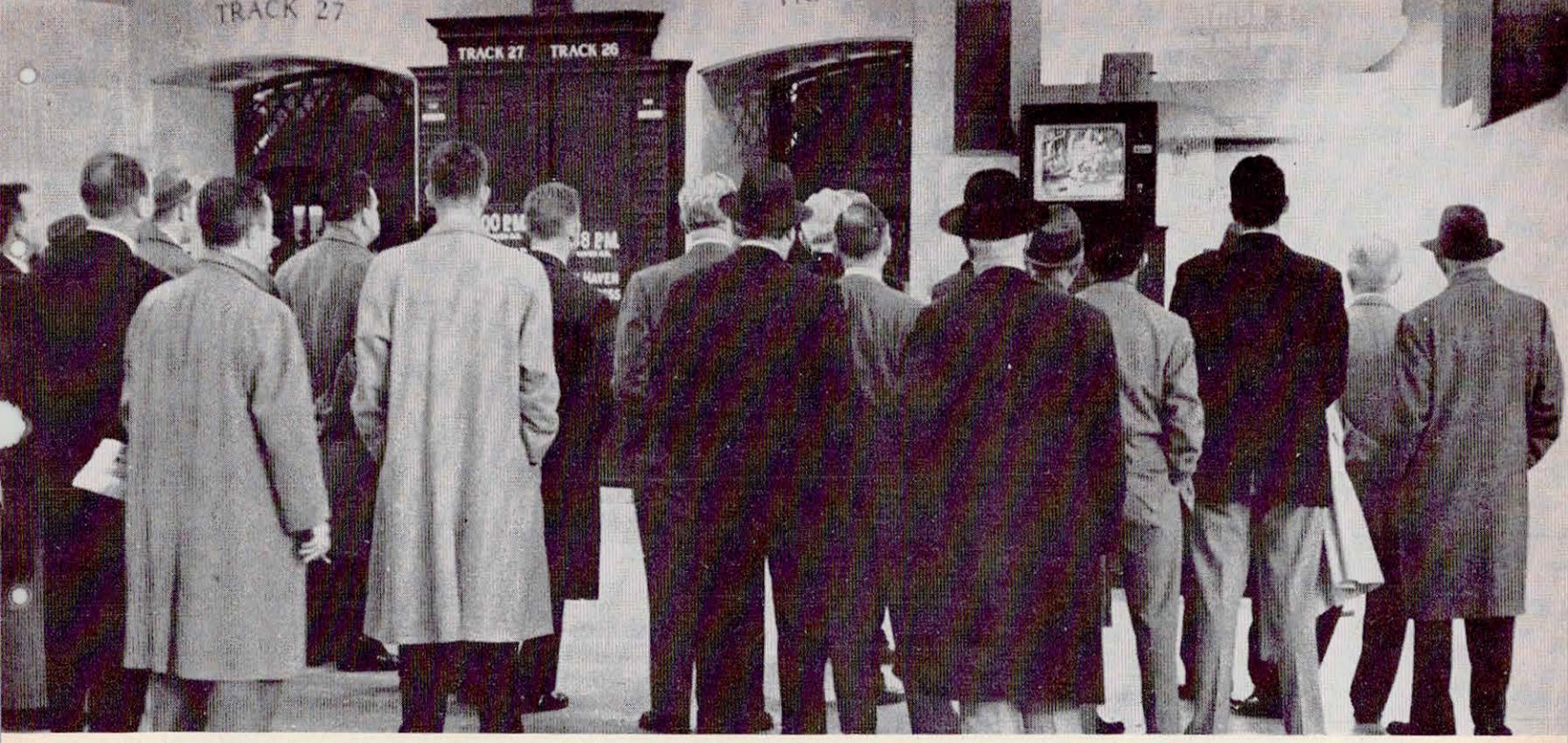
◄ it's squeezing our railroads."

"Competing with government."

"We aren't talking 4% vs. 6%."

"The monopoly disappeared."



Sometimes the crowd got so big the volume was turned down to control it.

Drew A Crowd With Its Story

No campaign railroads can undertake is more crucial than that of winning public opinion. It's a continuing job; it has to be if the industry hopes to bring about changes in transportation policy which it needs to grow and prosper. Here's a chapter from one road's program for creating an informed public. It's something other roads may want to pick up and use.

The New York Central figures 1958 was a turning point in the industry's fight for relief from regulatory laws that made sense a half century ago.

But stopping erosion is one thing, rebuilding is quite another. With 1959 shaping up as a busy legislative year, it's never too early to begin the grass-roots job of keeping the public informed.

So the Central has moved into Grand Central with a movie—one the road made and used successfully in the early months of 1958.

For the past three weeks, 8 a.m. to 7 p.m., a TV-size movie projector has been drawing big crowds with continuous showings of "The Big Train." The public reaction has amazed even NYC officers.

A photographer, camped behind a nearby train gate and armed with a telescopic lens, recorded the crowd reactions you see on these pages.

One point is obvious: the public, even hurrying commuters and busy shoppers, *is* interested in railroads. It stops to look; stays to listen. At times the crowd swelled to where it threatened to block traffic in the giant concourse, forcing the operator to lower the sound to reduce the number.

What these people have been seeing, and hearing, is an out-and-out railroad story—with the emphasis on the positive.

"The Big Train" is a 30-minute look at up-to-date railroad facilities: the power, the cars, the yards, the CTC, the track, the shops, the research facilities, the behind-the-scenes control centers and equipment —all the things that railroad men see and know but which are eye-catching sights to laymen.

Movie men Perlman (r.) and Nash start film's first showing.

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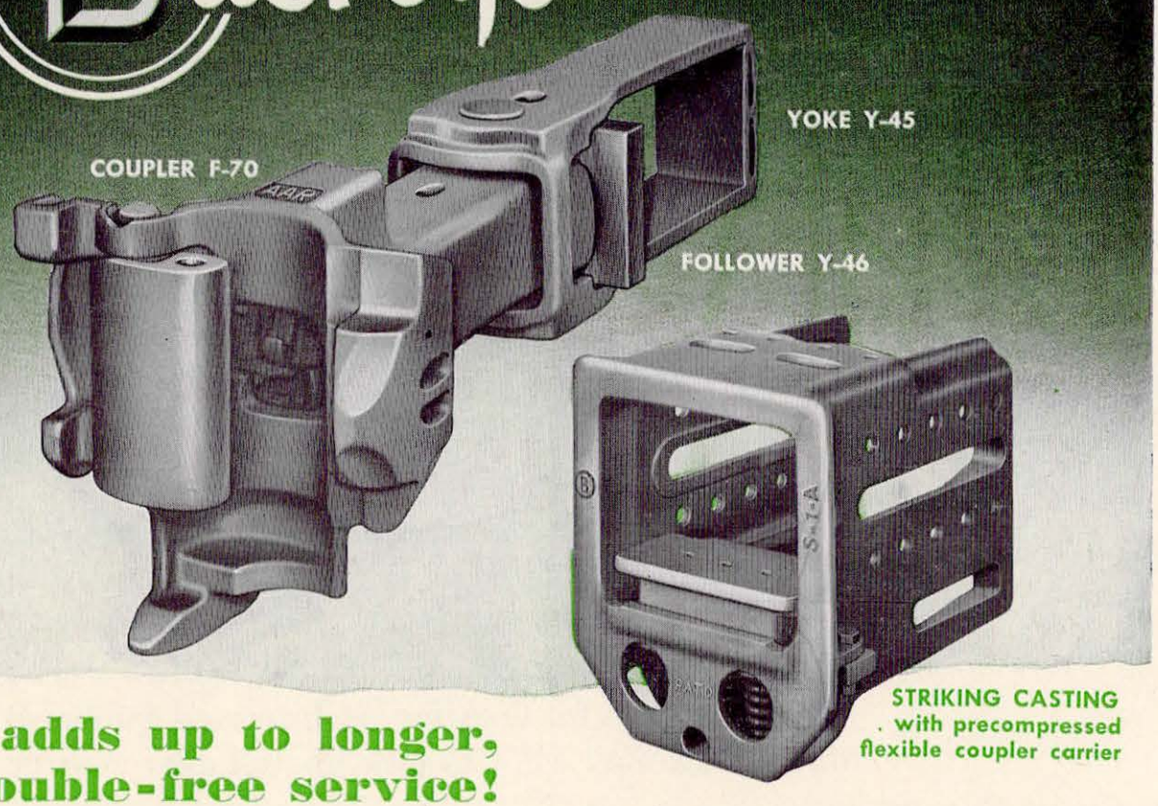

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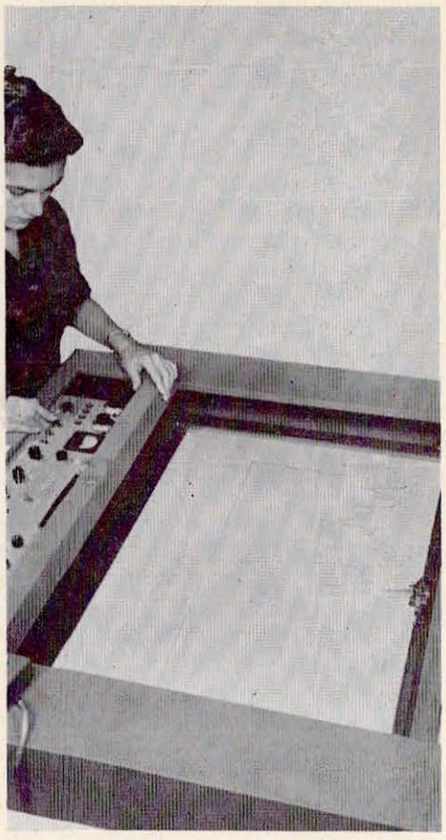
New Products Report



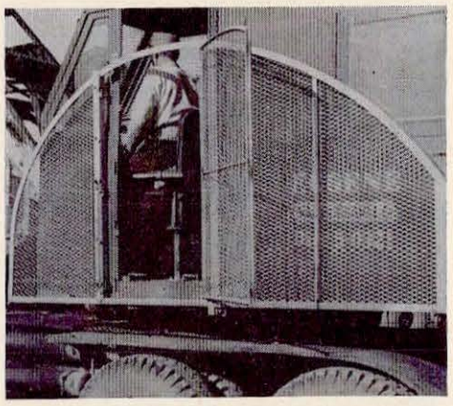
New Dataplotter

A new method of presenting findings in graph form is made possible with an electronic machine which quickly and accurately reads information from punched cards and plots it automatically. The Dataplotter was designed to ease the task of interpreting data produced by computers by converting the data automatically into graphs, curves and mechanical drawings. Executives, engineers and architects can use the machine on an hourly basis. *Service Bureau Corp., Dept. RA, 425 Park Ave., New York 22.*

Plastic Jar Line

A plastic-jar line of EWA Exide stationary flat-plate batteries is now available in a complete range of capacities for power requirements in telephone, microwave and emergency lighting. EWA battery capacities now range upward in 60-a.h. increments from 180 to 660 a.h. (at the 8 hr discharge rate). Added to the line are 13, 17 and 21-plate single-cell batteries with capacities of 360, 480 and 600 a.h., respectively. The line now includes two and three-cell batteries with seven plates per cell and single-cell batteries with from 9 to 23 plates.

All EWA batteries have jars and covers of lightweight, heat-resistant, shock absorbent polystyrene. Electrolyte level lines are marked on all four sides of the jars. Batteries are supplied either charged and filled with electrolyte, or dry-charged. A special explosion-control device consists of a polystyrene hood or baffle over the plates which collects the gases and channels them through a cylinder vent and plastic vent plug. The covers are bonded permanently to the jars, providing leakproof construction. *Exide Industrial Division, Electric Storage Battery Company, Dept. RA, Box 8109, Philadelphia 1, Pa.*



Safety Circle

The Safety Circle is a device that minimizes fatalities and serious accidents to crane and shovel operators, leaving them free of tension from fear when equipment swings. It is easily mounted on any make or model of crane or shovel and provides an easy-access job-view platform. Oiler's job is easier and safer. For movement of equipment, Safety Circle hinges upward and locks securely in position. Designed and patented by the Andrus Machine Works. Distributed by *Answers Inc., Dept. RA, 1215 Oak Street, Eugene, Ore.*

Gas Fork Trucks

Two new heavy-duty, gas-powered fork trucks feature power-steering as standard equipment, pneumatic tires and patented "Wear-Proof" clutch, guaranteed unconditionally for 12 months. Model G-3OH has 3,000-lb capacity at 24 in. load center, and Model G-40, 4,000-lb capacity at 24 in. load center. Clutch consists of mechanically simplified 2-to-1 gear reduction. Horizontally mounted clutch and power train design introduces independent replacement of any part. *Pettibone Mulliken Corp., Dept. RA, 4700 W. Division St., Chicago.*

Photocopy Unit

Transcopy Meteor, a compact high speed photocopy unit, exposes, develops and prints finished copies up to 15 in. wide, of any length, in one-half minute or less. The two-tone (gray-rite and mist-gray) Meteor is designed for use under fluorescent or bright office lighting, with exclusive, built-in filter Safety Paper. It can be plugged into standard electrical outlets. Overall dimensions are: length 26½ in., width 15½ in., height 9¼ in., throat width 15 in. *Remington Rand Div., Sperry Rand Corp., 315 4th Ave., New York 10.*

BIG POWER CHANGES

(*Continued from page 16*)

dustry and the railroads is the development of economic nuclear power. But the tremendous progress which has been made toward the achievement of that power has resulted only from federal expenditure of literally billions of dollars for research, development, construction and operation. There is no way to determine what portion of the expenditures of the Atomic Energy Commission and the Defense Department is allocable to the development of power reactors; but there is little question that similar sums expended to improve the thermal efficiency of conventional generation, to reduce the cost of coal transportation, or to accelerate the development of high voltage transmission, would result in lowering the cost of conventional electric power to a point which would postpone the date when nuclear power could become economically feasible.

Research Expenditures

The attitude of railroads and the coal industry has been at first to oppose the expenditure of funds by the AEC and later to support a modest federal expenditure for research largely on the technical problems of coal combustion. But the expenditure is small in proportion to the threat to railroads from the expenditures for nuclear power development. The nuclear power subsidies pose as serious a threat to the rails as do the subsidies to other forms of transportation against which the rails have long had to contend. If the rails are not to lose the opportunity to participate importantly in the movement of large volumes of bituminous coal over the next twenty years they and the coal industry should consider seeking substantial appropriations for research designed to lower the cost of coal production and rail transportation and to increase the thermal efficiency with which coal can be consumed.

On a longer-range basis it may become increasingly important for the rails to enter non-rail forms of fuel and energy transportation.

It is the affirmed policy of the government to achieve economic nuclear power and this concept is already expanding from electric power to reactors for industrial process heat. Given enough time and enough money (and the government has spared neither—in the most recent session of the Congress the AEC received more funds for reactor development than it requested) the result will be achieved.

Economic nuclear power means power at or below the cost of power from alternative sources, in the case of electric power, the source being primarily bituminous coal. The principal economic advantage of nuclear power is, after all, the fact that it frees energy consuming industries from their dependence upon fuel (or hydro) resources which are by geological accident highly concentrated, exhaustible, and costly to transport. The object of nuclear power is to bring energy to the market at the same cost as if the market were located at the energy source. In other terms, one goal of nuclear power is to eliminate the costly transportation of conventional fuel. No one knows what the timetable for these developments will be, but significant progress is being made. Many economists expect that the nuclear share of the power market will be small until the 1970's and then grow rapidly.

Competition Will Grow

The prospect facing the railroads, then, is for increasingly severe competition in a growing market for coal until nuclear energy enters the picture. Thereafter the market itself may decline, unless foresighted action forestalls the event. The railroads cannot begin too soon to take prompt and decisive action to assure their position in the future energy market.

Current Publications

FROM THE MANUFACTURERS

WELDER'S TRAINING MANUAL, INERT GAS PROCESS. 132 pages. Illustrated with photographs, drawings, charts and statistical tables. Technical Publications Department, Kaiser Aluminum & Chemical Sales, Inc., Dept. RA, 919 North Michigan ave., Chicago 11. Available free on request on company letterhead; $1 per copy when requested for personal reference use.

Material in this manual covers three primary functions essential to aluminum welding. The opening section presents essential factors about both tungsten-inert-gas and metal-inert-gas welding techniques. The second and third sections give step-by-step exercises to promote proficiency in metal-inert-gas welding. Exercises are based on actual practices originated in Kaiser's Department of Metallurgical Research.

•

BOOKLET KD-849 (FLEXOPRINT). 20 pages, illustrations. Remington Rand Division, Sperry Rand Corp., Dept. RA, 315 Fourth ave., New York 10. Free.

Two major problems that must be faced when producing any kind of published list are cost of change and speed of publication. Flexoprint is a system designed to solve these troublesome production problems. In the production of directories, catalogs, price and parts lists, **change** is the major cost factor. Lists change, and corrections by methods other than Flexoprint are expensive. With Flexoprint, lists are kept up-to-date in your own office by your own typist, always ready for reprinting in hours or days.

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•

A NEW APECO PRODUCT FOR YOUR OFFICE. 18 pages, illustrations. American Photocopy Equipment Company, Plastics Division (Dept RA), 2100 W. Dempster st., Evanston, Ill. Free.

Describing plastic binding for office paperwork, the booklet is itself bound in plastic so the reader can observe directly the advantages of the product. It introduces the APECO method of plastic binding, pictures the "Bindak" punching and binding units available, describes the company and its services, and compares the cost of plastic with other binding methods. The booklet also includes a chart of suggested applications for plastic binding, broken down into office departments.

BULLETIN IT-528. 12 pages. C & D Batteries, Inc., Dept. RA, Conshohocken, Pa. Free.

Gives details on the firm's complete line of premium **Slyver-Clad** truck batteries. It covers plate and cell construction, weights, sizes and tray arrangements for both rider and hand trucks, connector data and a complete listing of the company's sales and service offices. In addition, it lists some of the advantages of using electric trucks.

•

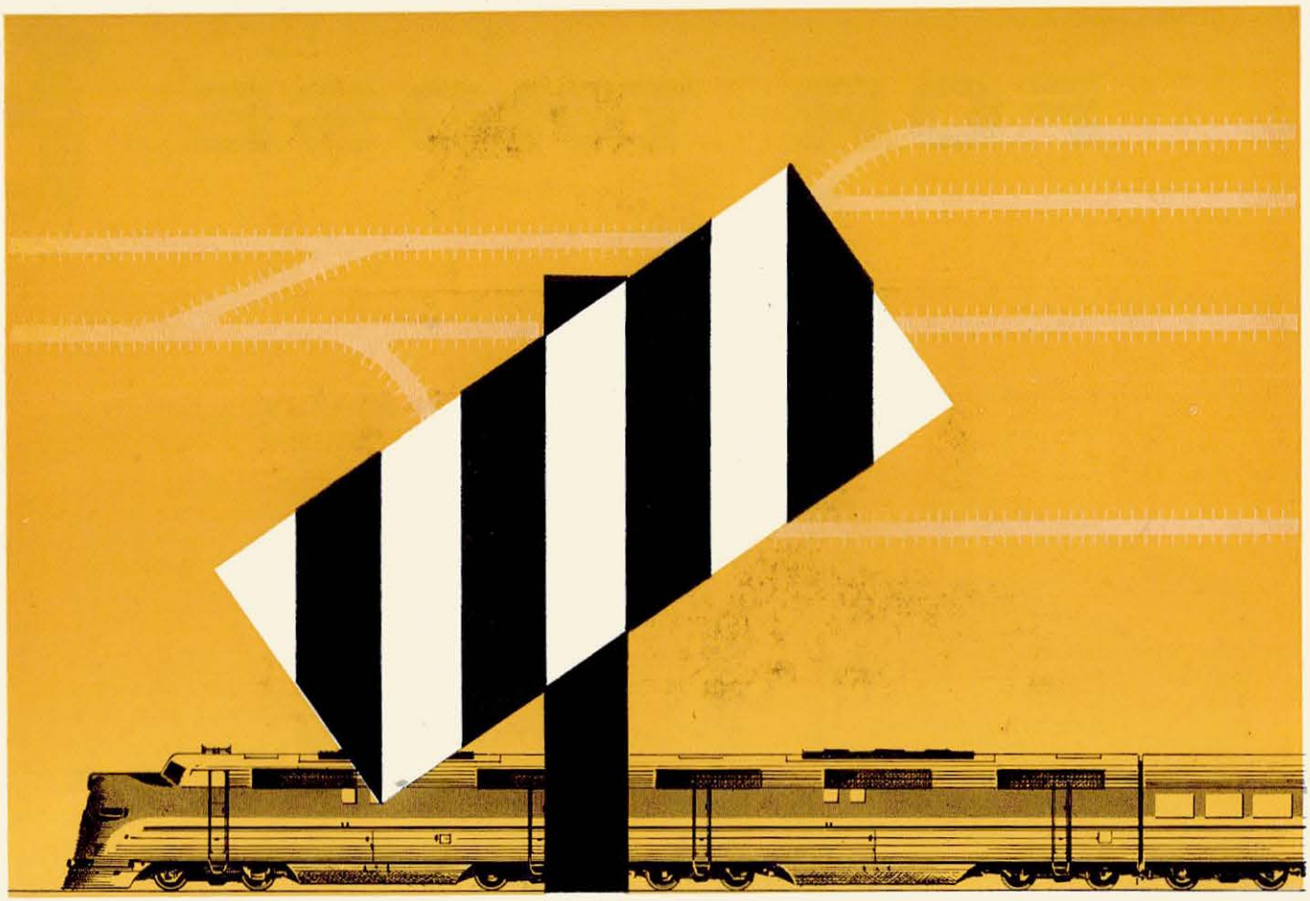
COOL-PAK JOURNAL LUBRICATOR. 6 pages, illustration. Uni-Pak Corp., Dept. RA, Box 8302, Pittsburgh 18. Free.

Cool-Pak, a revolutionary approach to journal lubrication, makes use of wicking loops which maintain constant contact with the journal by means of stainless steel center cores. Featured in the bulletin are answers to sixteen questions railroad men ask most about Cool-Pak, as well as construction details and installation directions.

•

HOW TO STRIP PAINT (Booklet F7893). 6 pages. Oakite Products, Inc., Dept. RA, 19 Rector st., New York 6. Free.

Four methods commonly used by leading industrial plants to remove paint are described in detail. The booklet first describes 12 different paint stripping compounds and then discusses the removal methods—the Oakite hot-flow-on method, tank immersion, steam gun, and brushing. It also discusses treatment of metals before repainting, and prevention of rust on stripped surfaces in storage.



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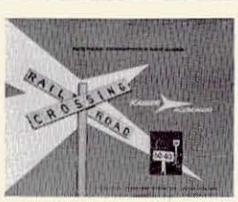

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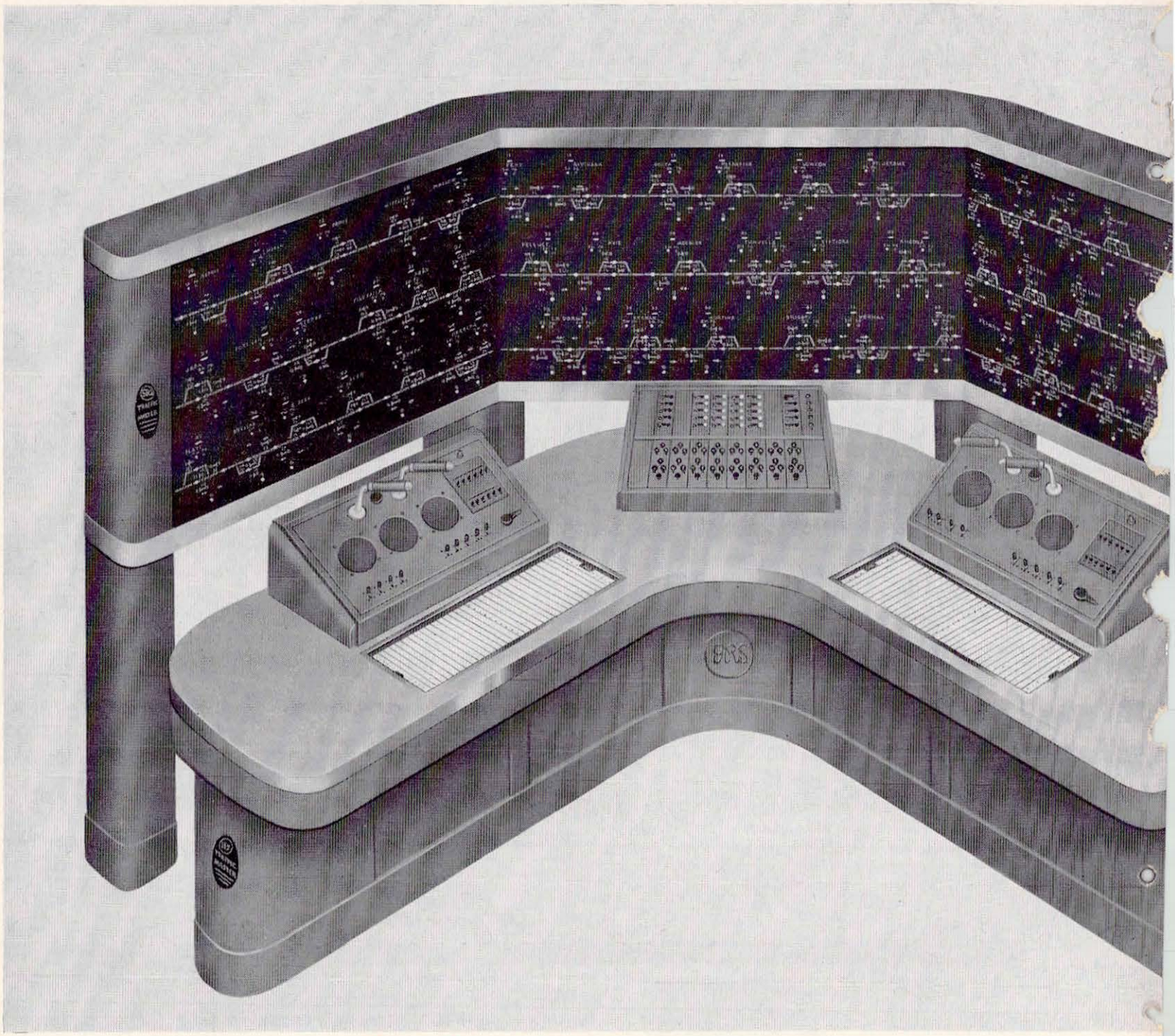

Where mileage is the factor. By stacking track diagrams in tiers, many miles of single-track cTc can be compressed into a single, easy-to-read indication panel.

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GRS TRAFFIC MASTER

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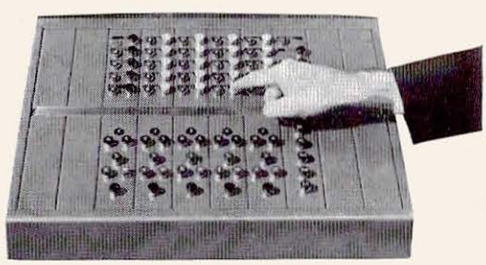
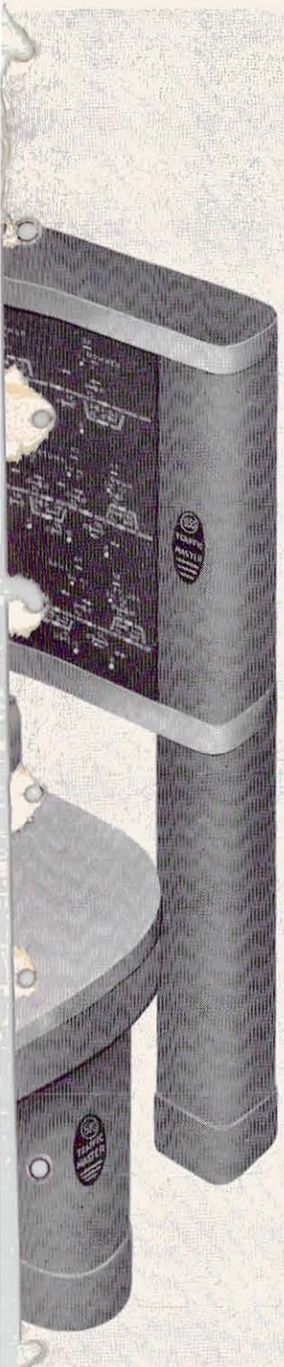
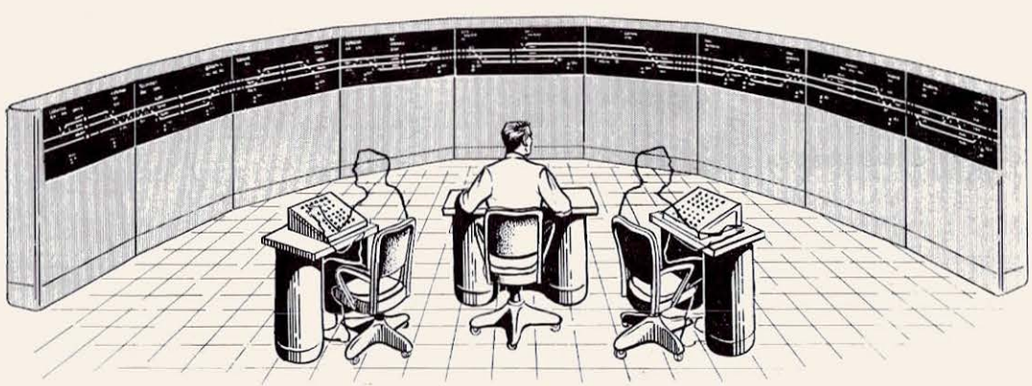
The *accepted* control office equipment for large cTc installations, GRS Traffic Master fits *any* size job without sacrificing compactness.

Eight installations are in service or proposed, in the United States, Canada and South America.

Traffic Master enables an operator to control switches and signals remotely by simply pushing a few buttons on a small console. Train movements and other information are clearly displayed on a separate diagram to guide him for top performance.







Where traffic density varies. Large control centers may require more than one operator when traffic is at its seasonal peak, each having his own console. With GRS Traffic Master, control may be divided among the consoles—or concentrated at a single one. Thus you can fit manpower to traffic needs, keep operating costs down.

For complex layouts. When multiple-track mainline including complex interlockings is the problem, a large-scale track diagram provides complete detail with maximum visibility.

outlasts ALL other insulating materials

6 MAJOR REASONS WHY LEADING REFRIGERATOR CAR LINES SPECIFY *Streamlite* HAIRINSUL

1. **LOW CONDUCTIVITY.** Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.
2. **LIGHT WEIGHT.** Advanced processing methods reduce weight of Streamlite Hairinsul by 40%.
3. **PERMANENT.** Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.
4. **EASY TO INSTALL.** Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.
5. **COMPLETE RANGE.** Streamlite Hairinsul is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other specified coverings are available.
6. **HIGH SALVAGE VALUE.** The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

No matter how long the haul, no matter how hazardous the travel conditions, refrigerator cars protected by Streamlite HAIRINSUL deliver their perishables safely.

Once Streamlite HAIRINSUL is installed, there are no maintenance problems. Streamlite HAIRINSUL is a one-time investment that actually outlasts the life of the car.

AMERICAN HAIR & FELT COMPANY
Merchandise Mart • Chicago 54, Illinois

SETS THE STANDARD BY WHICH ALL OTHER REFRIGERATOR CAR INSULATIONS ARE JUDGED

Letters from Readers

'Beneath Contempt'

Kingston, Canada

To the Editor:

I have read the interview with Mr. [H. E.] Gilbert in your issue of Nov. 3. I take it that he is deeply concerned lest discussion of the use of firemen-helpers on diesel locomotives in the United States be influenced by the conclusions of the Kellock Commission in Canada which was appointed to consider that question.

As a citizen of Canada, I have no wish to express any opinion upon an American problem. You in your country can carry on that discussion in any manner that seems proper to you.

But insofar as the Canadian experience is concerned, Mr. Gilbert bears the responsibility that comes from involvement in our affairs as head of a union with members from coast to coast. When he speaks, he will be held responsible in Canada if he wilfully misrepresents the facts of what was done here, and, especially, if he attacks the independence and honor of the respected judges who formed the Kellock Commission.

Canadians have already had one taste of Mr. Gilbert's efforts. In about a month last spring, he did more to establish justice of the CPR case in the public mind than the railway's own public relations officers could have done in years of concentrated effort. And now we have had enough. If he refers in future to what was done here, let him do so clearly and honestly or not at all.

J. L. McDougall
Queens University

B&O Branch Line

Cumberland, Md.

To the Editor:

Appreciate very much the very fine article on our South Branch Sub-Division ("How One Branch Line Pays Off," RA, Nov. 3, p. 30).

We are proud of this branch line operation and would like to send some reprints of the article to our important shippers at Romney, Moorefield and Petersburg, W. Va.

L. W. Brown
Division Freight Agent
Baltimore & Ohio

One Way Each Day

Monroe, La.

To the Editor:

In reading article entitled, "How One Branch Line Pays Off," which appears in the November 3 issue of Railway Age, I notice on page 33 it is stated, "Engine crews operate on a mileage basis, and have an agreement that calls for crews to make the daily round trip. The trainmen have a different agreement. Two crews are assigned, one working one way each day." However, below the picture in right hand corner of this same page it is stated, "Train crews operate in turnaround service."

Will you please advise which of these statements is correct?

D. T. Barksdale
Superintendent
Missouri Pacific

(Editor's note: Text is correct, caption is in error. Our faces are red.)

'How to Fool Mr. Khrushchev'

Cambridge, Mass.

To the Editor:

I wouldn't be without Railway Age or Railway Signaling and Communications. The articles in each are timely and informative. The Action Page article, "How to Fool Mr. Khrushchev" (RA, Oct. 6, p. 42) is full of good meat—every Senator and Representative should receive a copy.

E. A. Carlson
Manager of Railroad Sales
Simplex Wire & Cable Co.

Added Improvements

New York, N. Y.

To the Editor:

Our attention is attracted by one section in particular in your feature presentation "Tomorrow's Railroad" in Railway Age of October 27. On page 43, you list four needed improvements. Our currently available progress, with application to these problems, is as follows:

1. A better brake to control slack action. We are able at this time to operate tranis fully automatically, thus eliminating road crew costs and the need for the excessively long trains in which slack action is experienced. The attempt to control slack action avoids the real problem which is to make it unnecessary to accumulate cars for long and therefore infrequent trains. The automation does not try to solve the problem, it eliminates it and at the same time makes possible other savings and service improvements.

2. A self-aligning coupler with built-in control lines: Self-aligning couplers are easily accomplished by the use of centering springs. Couplers with built-in controls have been in use for some forty years now.

3. Automatic bleeding: Techniques available to us, some developed in our own laboratory, can accomplish this purpose.

4. Inexpensive power switch machine: Our machine design section advises that it can adapt readily available, reliable operators of various kinds to any of several widely used switch stands, retaining the possibility of manual operation, adaptability to interlocking, etc., at a cost but a small fraction of the cost of currently sold power switch machines.

To the foregoing list you published, we would add two more items. They are:

5. A remotely controlled uncoupling device that will selectively uncouple cars being classified, controlling angle valves if needed: Techniques now available in our laboratory, some developed by us, can accomplish these purposes.

6. A device to read car numbers automatically and reliably, directly into commercial data processing equipment and control elements: Our laboratory has two systems available for this purpose that will meet the service requirements, at modest cost.

In all the above, the only remaining requirement is a client. All of the above, except numbers one and four, need an element installed on each car. Such equipment, if universally adopted, could pay its own way, industry-wide, in very short order.

You can do us and your readers a favor if you will tell us who will buy these developments, without involving a sales expense that will raise the cost of the results to levels your industry cannot afford.

Theodore J. Kauffeld, M.E., P.E.
Consulting Engineer

'Keeps One Versed'

Oakland, Cal.

To the Editor:

Your article "Tomorrow's Railroad" is well written and timely. The detail your publication has gone to in connection with the railroads and possibilities and tools they have at hand is very well written. This also goes for other articles in Railway Age. I find your magazine very interesting and appreciate the information it contains, which keeps one versed on our present times.

George D. Cron, Traffic Manager
Chevrolet-Oakland Division of
General Motors Corporation

Combined Issues

Dearborn, Mich.

To the Editor:

I have looked over the last issues of Railway Age for September and October, incorporating, as they did, the material which had theretofore been published separately in Railway Freight Traffic. The change seems to be a very worthwhile one and I am hopeful that it will be successful in continuing the sales promotional job for railway freight service which you originally had in mind in inaugurating Railway Freight Traffic . . .

I liked your running article entitled "Tomorrow's Railroad" in the October 27 issue. Whoever got this thing up used a lot of imagination and did a masterful piece of writing.

David E. Smucker, President
Detroit, Toledo & Ironton

'Painless' Wage Hike Formula?

Canada's Transport Commissioners have decided that anticipated labor costs—like traffic estimates and forecasts of the economy—can be a legitimate factor in setting freight rates.

► **The Story at a Glance: A probable increase in labor costs is a legitimate factor to be considered in setting freight rates, according to Canada's Board of Transport Commissioners.**

Rates, the Board said, are made for the future. Consequently, consideration of what rate may be reasonable may include not only facts from past experience but also opinion as to what may come. Future labor costs play a part in forming this opinion of what lies ahead.

This look-ahead theory as applied to labor expense was contained in the Commissioner's order granting the Canadian railways a 17 per cent freight rate hike. The roads made application for the increase to cover wage costs not yet paid or even contracted for.

Both the Board and the Cabinet, however, back away from any implication that this rate decision will serve as precedent. The threat of a nationwide rail strike was the pressure which forced approval of this increase. But as for the future—the government has served notice on both management and labor: reach agreement first, then go for rate hikes if need be.

When Canada's railways attempted to tie wage increases to rate increases, they hit stiff opposition. Counsel for the provinces (all but Ontario and Quebec) contended that the Board of Transport Commissioners would set a dangerous precedent by approving a rate boost in advance of the actual wage boost. The non-operating unions—those directly concerned with the present wage case—have never conceded that the rate case is connected to the wage issue. But the railways moved ahead doggedly, determined not to commit themselves to increased labor cost without first obtaining assurance of sufficient revenue to cover the extra cost.

Approval of the rate increase means that shippers will be paying the railroads almost $60,000,000 additional next year. Increased labor costs will eat up the entire amount. And the railways will be no better off than they were, from a standpoint of net income.

The unions, backed up by a Conciliation Board recommendation for a wage hike, took a detached view of the rate negotiations. They made their move by accepting the Board's report, then charged the carriers with stalling and set a strike date. The railways, in a tight economic spot, had to go for rate increases before accepting or rejecting the wage recommendations. And a reluctant government, faced with decision five days in advance of a strike, grudgingly approved the rate increase.

The carriers and the non-ops have already reached agreement on the new wage rates (which became effective Dec. 1). Negotiations have been resumed with the operating crafts and it's expected the eventual wage agreement will generally follow the non-op pattern.

The original ruling by the Board of Transport Commissioners in the non-ops case was in many ways a victory for the first-things-first theory. The final ruling by the Cabinet tended to neutralize that victory.

In granting the carriers 17 per cent and 22 cents per ton on coal and coke (in lieu of 19 per cent and 25 cents per ton requested) the Board had this to say about the justification for considering the probabilities on labor costs:

"When the Board fixes rates it fixes them for the future, and when the question of what are reasonable rates for the future is before the Board it may consider not only what may be established on the basis of past transactions but also may form a judgment and opinion as to what will be reasonable rates for the future under conditions which have not yet occurred and consequently must be estimated . . .

"In fixing freight rates for the future (the Board) has on previous occasions considered future traffic volume; what the state of the economy would be; what savings and economies were likely to result from, for instance, dieselization and other technological improvements; and what the effect of freight rates would be . . .

"If the Board may look to such things and take them into consideration in fixing freight rates, it considers that it may also take into consideration for the same purpose the probability or otherwise that increased labor expenses will be paid by the railways in the period for which freight rates are being authorized.

"The Board is satisfied that the probability of payment by Canadian National and Canadian Pacific of the increased labor expenses is so strong that it should take them into consideration and include and count them as payable expenses in appraising the financial position of the railways for the immediate future."

Counsel for the provinces held that consideration of future labor expense as payable and authorization of increased rates on that basis would set a dangerous precedent. Such action, the provinces said, would involve the Board in the determination of wages and in "premature and unwarranted" rate increase applications.

The Board passed off the objection, but added this warning to its opinion:

"The Board expects that wage demands of employees will continue to be dealt with by way of arms-length bargaining in good faith and that recourse will be had to the normal processes of collective bargaining . . . In any event, the Board has power to deal appropriately with an abuse by any party of the right to apply to the Board for relief, and it warns the parties concerned that its decision in this application has been arived at in the particular circumstances established by the evidence. It cannot be anticipated that the Board will accede in future to applications for rate increases due wholly or partially to proposed wage increases until agreement has been reached between the employees and the railways by completion of the usual processes of labor negotiation."

Acting Prime Minister Howard Green viewed the situation even more strongly. The type of rate boost approved, he noted, "is not in accord with the government's long-range plans . . . We consider that, in future, the railways and their employees must come to a definite agreement before a wage increase should be accepted by the Board of Transport Commissioners as the basis for an increase in freight rates. Otherwise, the Board . . . is apt to be forced into making judgments about wage settlements which are not its proper responsibility. In the present case we are not allowing the appeal (by the provinces) on this ground because to do so at this stage would precipitate a nationwide strike over an increase in wages . . . which increase neither the railways nor the provinces have resisted or will resist."

Mr. Green also noted that "there are serious inequities in the present freight rate structure which have both contributed to and been aggravated by the system of horizontal rate increases . . . A study is being undertaken at once to work out measures to relieve against inequities in the freight rate structure, including any that may be aggravated by the present increases."

The proposed wage increases cost CNR $41,500,000 and CPR $26,500,000 if applied to all railway employees. The rate increases authorized by the Board of Transport Commissioners would provide estimated additional revenues of $32,000,000 for CNR, $25,000,000 for CPR.

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1958

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1958	1957	Operating Expenses: Maint. Way and Structures: Total 1958	Total 1957	Deprec. and Retirements	Maint. Equipment: Total 1958	Total 1957	Deprec. and Retirements	Traffic	Transportation	Total 1958	Total 1957	Operating ratio 1958	1957	Net from railway operation	Railway tax accruals	Net Railway operating income 1958	1957
Akron, Canton & Youngstown	Sept.	171	475	....	486	560	54	69	6	63	74	15	37	158	353	408	72.7	72.8	133	74	43	40
	9 mos.	171	3,700	....	3,791	4,973	465	652	49	580	650	133	354	1,293	3,122	3,613	82.4	72.7	669	370	119	412
Alabama, Tennessee & Northern	Sept.	214	256	....	260	284	50	49	6	10	15	6	4	87	154	162	59.1	57.1	106	9	47	19
	9 mos.	214	2,202	....	2,227	2,903	446	443	52	212	146	51	37	784	1,514	1,447	68.0	49.9	713	108	121	338
Atchison Topeka & Santa Fe	Sept.	13,086	42,671	3,167	50,461	44,680	6,538	7,849	1,017	9,581	9,992	2,360	1,253	17,725	37,394	38,464	74.1	86.1	13,067	6,765	5,564	2,133
	9 mos.	13,119	360,300	30,139	429,398	453,409	53,391	67,552	7,260	84,859	94,686	20,894	11,672	154,215	325,246	352,335	75.5	77.7	104,151	58,067	42,934	41,981
Atlanta & St. Andrews Bay	Sept.	81	358	....	361	360	32	33	3	29	32	8	7	71	161	159	44.7	44.2	200	93	74	71
	9 mos.	81	3,106	....	3,139	3,432	309	377	31	265	265	66	61	632	1,460	1,516	46.5	44.2	1,679	786	583	696
Atlanta & West Point	Sept.	93	240	17	310	307	32	42	7	48	61	14	17	138	256	384	82.7	92.4	54	17	15	1
	9 mos.	93	2,022	211	2,709	2,853	328	393	61	468	550	129	153	1,316	2,456	2,615	90.6	91.7	254	164	—112	—22
Western of Alabama	Sept.	133	276	16	332	328	43	53	8	47	63	19	19	127	256	289	77.3	88.0	75	49	29	25
	9 mos.	133	2,395	197	2,929	3,012	404	453	76	500	593	173	176	1,214	2,485	2,667	84.8	88.6	444	318	162	208
Atlantic Coast Line	Sept.	5,306	10,161	876	11,965	11,923	1,834	1,884	180	2,304	2,981	654	442	4,831	10,029	10,828	83.8	90.8	1,936	1,000	806	679
	9 mos.	5,298	90,725	11,634	110,938	123,417	16,321	18,418	1,851	21,017	26,503	6,004	4,073	45,564	93,087	104,018	83.9	84.3	17,851	7,725	5,682	7,252
Charleston & Western Carolina	Sept.	343	554	....	565	581	117	140	14	87	97	29	23	165	409	440	72.4	75.7	156	110	68	65
	9 mos.	343	5,061	....	5,177	5,341	1,040	1,269	71	765	897	262	193	1,539	3,694	4,115	71.3	77.0	1,484	930	536	616
Baltimore & Ohio	Sept.	5,935	29,280	1,041	32,671	38,079	3,499	4,483	664	5,810	7,145	1,141	933	13,904	25,904	30,638	79.3	80.5	6,767	2,097	2,752	3,442
	9 mos.	5,940	252,718	11,345	283,722	349,774	28,777	40,258	5,096	48,643	65,265	10,240	8,440	125,584	227,569	280,956	80.2	80.3	56,153	18,491	21,389	28,492
Staten Island Rapid Transit	Sept.	29	190	84	282	290	59	61	12	35	32	2	2	162	291	285	102.9	98.2	—8	45	—78	—70
	9 mos.	29	1,818	634	2,543	2,440	492	525	101	326	323	16	19	1,416	2,549	2,572	100.2	105.4	—6	407	—628	—795
Bangor & Aroostook	Septl	602	621	21	678	749	175	144	22	286	270	113	32	256	840	811	123.7	108.2	—161	Cr.76	74	164
	9 mos.	602	10,529	209	11,166	11,982	2,669	2,444	176	2,570	2,412	1,022	297	3,188	9,519	9,449	85.3	78.9	1,647	742	1,933	2,303
Bessemer & Lake Erie	Sept.	203	2,677	....	2,694	3,098	288	228	25	480	638	141	38	522	1,478	1,610	54.9	52.0	1,216	904	711	837
	9 mos.	206	12,955	1	13,085	22,983	2,272	2,005	323	4,528	5,998	1,261	383	3,912	12,394	14,163	94.7	61.6	691	1,978	1,024	5,954
Boston & Maine	Sept.	1,570	4,990	631	6,464	7,102	812	1,137	147	859	807	294	139	2,736	4,938	5,557	77.1	78.2	1,526	477	577	474
	9 mos.	1,570	44,035	6,721	57,341	64,675	8,235	9,013	1,362	7,840	8,131	2,641	1,346	26,932	47,972	51,846	83.7	80.2	9,369	4,455	355	4,244
Canadian Pacific Lines in Maine	Sept.	234	416	61	504	407	138	120	19	59	63	17	9	151	372	371	73.8	91.1	132	32	63	—51
	9 mos.	234	5,276	448	5,969	5,636	1,130	1,070	152	866	951	156	79	1,757	3,989	4,363	66.8	77.4	1,980	303	1,033	483
Carolina & Northwestern	Sept.	284	298	....	303	287	42	53	7	28	19	21	5	72	162	157	53.5	54.8	141	53	52	53
	9 mos.	284	2,304	....	2,357	2,708	430	519	62	271	179	177	47	683	1,566	1,545	66.4	57.0	791	172	338	489
Central of Georgia	Sept.	1,763	3,241	113	3,582	3,686	592	548	52	654	617	194	165	1,456	3,053	2,945	85.2	79.9	529	174	436	491
	9 mos.	1,763	28,296	1,125	31,490	33,001	5,242	4,888	432	5,832	5,631	1,717	1,528	13,103	27,404	26,886	87.0	81.5	4,086	1,959	2,496	3,745
Central of New Jersey	Sept.	600	3,764	486	4,612	5,103	510	688	123	691	880	100	65	2,402	3,883	4,080	84.2	79.9	730	506	22	366
	9 mos.	603	32,572	4,512	40,081	44,909	4,782	5,134	1,131	6,863	8,008	1,314	658	19,499	33,897	36,132	84.6	80.5	6,183	4,219	167	2,624
Central Vermont	Sept.	375	785	45	905	979	412	478	18	93	99	9	18	355	922	993	101.8	101.4	—17	52	—196	—196
	9 mos.	378	6,805	507	7,951	8,756	2,484	2,552	171	946	1,001	86	167	3,273	7,233	7,529	91.0	86.0	718	461	—1,050	—533
Chesapeake & Ohio	Sept.	5,131	30,527	415	32,724	37,829	3,350	4,424	479	4,882	5,638	1,871	698	10,707	21,258	24,386	65.0	64.5	11,466	4,847	6,660	7,242
	9 mos.	5,131	239,980	4,758	259,691	326,920	27,840	39,374	4,207	43,762	53,468	16,867	7,021	94,718	188,136	222,254	72.4	68.0	71,555	29,191	43,274	58,401
Chicago & Eastern Illinois	Sept.	862	2,605	151	3,008	2,969	355	415	30	468	537	149	148	1,160	2,302	2,423	76.5	81.6	706	207	220	214
	9 mos.	862	22,554	1,571	26,252	28,843	3,331	3,335	281	4,372	4,790	1,352	1,285	10,691	21,202	22,197	80.8	77.0	5,049	1,834	1,168	3,022
Chicago & Illinois Midland	Sept.	121	502	....	519	644	40	50	9	91	124	24	30	131	336	401	64.8	62.3	183	105	79	102
	9 mos.	121	4,314	....	4,483	6,015	353	436	77	918	963	218	277	1,247	3,179	3,467	70.9	57.6	1,304	700	477	1,114
Chicago & North Western	Sept.	9,289	16,813	1,397	19,869	18,809	3,141	2,805	347	3,115	3,103	975	575	7,572	15,432	15,584	77.7	82.9	4,437	1,262	1,707	875
	9 mos.	9,315	132,571	13,219	159,692	164,800	24,126	26,571	3,384	25,905	26,705	8,736	4,732	68,378	132,600	140,201	83.0	85.1	27,093	11,136	6,400	4,970
Chicago, Burlington & Quincy	Sept.	8,710	18,988	1,691	22,698	21,622	3,233	4,115	390	3,814	3,677	1,000	573	8,682	17,282	17,839	76.1	82.5	5,416	2,548	2,155	1,134
	9 mos.	8,741	153,282	15,075	186,090	189,077	24,834	30,614	4,075	33,545	33,162	8,929	5,480	74,533	147,318	153,662	79.2	81.3	38,773	18,223	15,800	14,393
Chicago Great Western	Sept.	1,469	2,842	7	3,044	3,020	471	500	43	435	436	128	124	973	2,079	2,039	68.3	67.5	965	349	365	384
	9 mos.	1,469	24,562	88	26,235	28,161	4,121	4,205	404	3,901	4,297	1,186	1,132	8,450	18,306	18,956	69.8	67.3	7,930	2,716	3,193	3,483
Chic., Milw. St. Paul & Pacific	Sept.	10,590	20,486	1,197	23,841	22,940	4,041	3,288	498	3,547	3,456	924	502	8,640	17,944	16,804	75.3	73.3	5,807	1,549	3,583	3,325
	9 mos.	10,590	152,284	11,009	180,905	190,766	28,823	31,953	3,900	31,751	34,007	8,174	4,758	73,266	149,494	157,901	82.6	82.8	31,411	13,987	10,263	11,722
Chicago, Rock Island & Pacific	Sept.	7,577	14,398	1,223	17,096	16,554	2,470	2,625	242	2,987	2,981	631	518	6,725	13,612	13,653	79.6	82.5	3,484	1,466	985	661
	9 mos.	7,591	128,930	12,200	154,415	157,662	19,465	22,253	2,228	26,393	26,699	5,629	4,905	60,962	120,259	122,693	77.9	77.8	34,156	13,639	9,581	11,204
Clinchfield	Sept.	293	1,814	....	1,825	1,966	235	305	21	306	403	106	61	471	1,140	1,265	62.5	64.3	685	200	648	695
	9 mos.	293	15,325	3	15,424	17,420	2,049	2,697	193	2,910	3,567	920	564	3,807	9,908	11,472	64.2	65.9	5,516	1,826	5,118	5,841
Colorado & Southern	Sept.	716	1,250	77	1,466	1,503	203	175	25	195	196	65	35	665	1,171	1,045	79.9	69.5	295	136	111	203
	9 mos.	716	9,734	641	11,517	11,885	1,575	1,845	169	1,793	1,960	587	311	4,747	9,075	9,483	78.8	79.8	2,443	1,431	994	848
Ft. Worth & Denver	Sept.	1,362	2,075	156	2,485	2,131	267	287	39	251	241	45	69	892	1,601	1,493	64.5	70.1	883	320	266	296
	9 mos.	1,362	15,364	1,253	18,503	16,714	2,546	2,968	321	2,503	2,291	403	630	7,262	14,012	13,589	75.7	81.3	4,492	1,389	1,127	809
Colorado & Wyoming	Sept.	39	220	....	323	418	26	17	8	36	19	12	1	115	195	180	60.2	43.1	129	80	49	96
	9 mos.	39	1,559	....	2,518	3,436	168	144	26	276	383	109	13	920	1,529	1,890	60.7	55.0	989	606	348	600
Delaware & Hudson	Sept.	764	3,722	146	4,019	4,892	422	575	62	593	707	191	99	1,408	2,787	3,248	69.3	66.4	1,233	643	544	896
	9 mos.	764	31,543	1,268	34,353	42,383	4,167	5,033	621	5,781	6,934	1,621	915	13,362	26,690	30,014	77.7	70.8	7,662	3,717	3,120	6,787
Delaware, Lackawanna & Western	Sept.	922	4,680	724	6,164	7,386	732	734	216	1,113	1,070	353	191	3,219	5,619	5,954	91.2	80.6	545	659	—55	769
	9 mos.	926	42,883	7,006	57,294	64,648	6,553	7,066	1,613	9,680	9,427	3,189	1,678	30,289	51,617	54,908	90.1	84.9	5,677	5,934	—1,559	2,964
Denver & Rio Grande Western	Sept.	2,155	7,417	260	7,920	7,937	705	769	98	991	1,069	315	226	2,223	4,453	4,792	56.2	60.4	3,468	1,742	1,690	1,582
	9 mos.	2,155	51,689	2,309	55,893	64,150	6,581	7,804	845	8,367	9,533	2,855	2,052	17,626	37,371	41,275	66.9	64.3	18,522	9,487	8,980	11,991
Detroit & Toledo Shore Line	Sept.	50	490	....	555	540	57	62	4	78	78	24	21	201	373	365	67.2	67.5	182	64	37	39
	9 mos.	50	4,599	....	4,987	5,917	545	651	33	642	716	216	185	1,888	3,415	3,685	68.5	62.3	1,571	518	233	511
Detroit, Toledo & Ironton	Sept.	464	1,382	....	1,486	1,777	184	247	27	367	389	140	53	438	1,139	1,258	76.6	70.8	347	104	223	338
	9 mos.	464	11,751	....	12,261	16,819	1,791	2,323	254	3,095	3,686	1,194	494	3,922	10,133	11,787	82.6	70.1	2,129	948	1,318	2,833
Duluth, Missabe & Iron Range	Sept.	554	5,174	1	6,028	8,374	436	565	55	602	731	186	10	1,419	2,728	3,578	45.3	42.7	3,300	1,892	1,332	2,058
	9 mos.	561	24,642	9	28,850	47,332	4,428	4,737	906	5,613	6,930	1,619	110	9,295	21,620	27,689	74.9	58.5	7,230	4,767	2,351	8,357
Duluth, So. Shore & Atlantic	Sept.	544	559	3	600	685	112	131	10	103	100	26	32	209	482	513	80.3	74.9	118	31	73	131
	9 mos.	544	4,640	21	4,945	5,956	961	1,231	94	916	1,287	236	290	1,862	4,264	5,221	86.2	87.7	682	294	322	227

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a RAILWAY AGE Service Page

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1958

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1958	Total (inc. misc.) 1957	Operating Expenses: Maint. Way and Structures: Total 1958	Total 1957	Deprec. and Retirements	Maint. Equipment: Total 1958	Total 1957	Deprec. and Retirements	Traffic	Transportation	Total 1958	Total 1957	Operating ratio 1958	Operating ratio 1957	Net from railway operation	Railway tax accruals	Net Railway operating income 1958	Net Railway operating income 1957
Duluth, Winnipeg & Pacific	Sept.	175	529	4	537	460	96	159	5	55	62	1	7	179	347	416	64.5	90.5	190	44	61	—79
	9 mos.	175	4,429	9	4,487	4,648	777	773	46	541	530	10	64	1,602	3,074	3,069	68.5	66.0	1,413	364	310	391
Elgin, Joliet & Eastern	Sept.	236	2,902	....	3,845	4,561	302	269	29	560	855	126	39	1,343	2,555	3,045	66.5	66.8	1,290	710	449	442
	9 mos.	236	23,169	....	30,415	43,404	2,353	2,680	249	8,525	8,467	1,122	389	11,724	25,833	29,796	84.9	68.6	4,582	3,127	705	3,531
Erie	Sept.	2,207	11,120	545	12,697	14,309	1,618	1,450	221	2,020	2,081	551	358	6,061	10,803	11,115	85.1	77.7	1,894	1,153	—53	1,030
	9 mos.	2,207	97,176	4,984	111,683	130,242	12,722	16,017	1,974	17,662	20,318	5,001	3,260	54,490	95,021	106,912	85.1	82.1	16,662	9,977	—719	7,757
Florida East Coast	Sept.	571	1,921	222	2,328	2,486	384	424	48	491	529	117	84	964	2,063	2,192	88.6	88.1	265	196	—143	—171
	9 mos.	571	20,066	3,642	25,769	29,498	3,630	4,319	418	4,830	5,256	1,044	784	9,988	20,688	22,999	80.3	78.0	5,081	1,873	1,155	2,001
Georgia Railroad	Sept.	321	569	13	660	694	82	94	8	107	121	35	40	297	562	603	85.1	86.8	98	35	87	106
	9 mos.	321	4,880	140	5,754	6,334	766	1,087	73	980	1,218	311	358	2,631	5,080	5,817	88.3	91.8	674	322	560	570
Georgia & Florida	Sept.	332	270	....	276	269	56	69	3	38	34	8	23	79	214	224	77.7	83.3	61	16	25	11
	9 mos.	332	2,387	....	2,437	2,521	632	634	35	319	343	72	201	735	2,049	2,141	84.1	84.9	388	148	46	41
Grand Trunk Western	Sept.	951	3,559	232	4,174	4,222	789	651	79	851	857	90	89	2,210	4,160	4,131	99.7	97.9	14	350	—829	—831
	9 mos.	951	34,039	1,936	39,159	44,062	6,468	6,195	547	7,587	8,232	822	837	20,526	37,401	39,751	95.5	90.2	1,758	3,226	—6,375	—3,755
Great Northern	Sept.	8,294	25,068	699	27,628	26,030	3,973	4,647	375	3,593	4,059	854	489	7,883	16,944	18,287	61.3	70.3	10,684	5,390	4,844	3,293
	9 mos.	8,277	162,467	7,584	182,743	210,689	28,824	38,580	2,797	34,562	36,065	7,541	4,878	65,660	143,193	160,271	78.4	76.1	39,550	21,729	15,812	18,943
Green Bay & Western	Sept.	219	375	....	388	408	96	74	4	50	64	9	25	131	326	302	83.9	73.9	62	24	7	23
	9 mos.	219	3,356	....	3,454	3,496	683	591	41	448	461	82	223	1,081	2,660	2,532	77.0	72.4	794	344	197	227
Gulf Mobile & Ohio	Sept.	2,757	5,988	225	6,659	7,078	980	1,072	80	1,223	1,391	300	298	2,320	5,193	5,464	78.0	77.2	1,466	402	701	541
	9 mos.	2,757	52,640	2,417	58,980	63,512	8,348	9,725	707	11,911	13,232	2,679	2,702	21,015	47,417	50,647	80.4	79.7	11,562	4,511	3,580	3,682
Illinois Central	Sept.	6,497	18,577	1,754	22,227	23,681	3,076	3,686	440	3,898	4,327	952	608	8,460	17,071	18,636	76.8	87.7	5,156	2,284	2,226	1,508
	9 mos.	6,497	158,542	15,712	192,894	217,154	27,280	34,484	3,744	36,025	41,178	8,590	5,547	76,918	155,617	172,365	80.7	79.4	37,277	19,600	13,773	14,397
Illinois Terminal	Sept.	334	1,003	....	1,178	1,034	157	111	12	169	193	31	46	385	819	799	69.5	76.4	359	127	111	85
	9 mos.	337	7,473	131	8,844	9,477	1,032	1,186	107	1,319	1,877	276	440	3,225	6,565	7,529	74.2	79.4	2,279	798	705	595
Kansas City Southern	Sept.	891	3,054	59	3,459	3,593	241	306	47	418	492	106	96	1,056	1,940	2,138	56.1	59.5	1,519	686	692	608
	9 mos.	891	27,813	689	31,459	34,065	2,397	2,906	430	4,205	4,330	954	852	9,907	18,545	19,750	68.9	57.9	12,915	5,604	5,561	6,008
Kansas, Oklahoma & Gulf	Sept.	327	442	....	443	386	58	48	7	29	30	12	31	84	229	217	51.6	56.3	214	85	94	68
	9 mos.	327	3,854	....	3,866	3,735	600	588	64	249	288	106	272	840	2,205	2,239	57.0	60.0	1,661	702	637	558
Lake Superior & Ishpeming	Sept.	160	495	....	608	873	58	84	12	55	70	21	2	117	256	337	42.1	38.6	352	203	163	262
	9 mos.	160	2,479	....	2,998	4,389	525	569	102	585	691	190	18	772	2,080	2,459	69.4	56.0	918	582	455	979
Lehigh & Hudson River	Sept.	96	275	....	276	345	32	35	2	36	52	8	18	102	201	231	73.0	66.9	75	28	11	26
	9 mos.	96	2,409	....	2,413	2,845	306	341	22	331	383	74	161	953	1,882	1,972	78.0	69.3	532	202	—16	159
Lehigh & New England	Sept.	177	625	....	631	779	94	90	9	134	196	51	22	245	538	593	85.3	76.1	93	39	202	—43
	9 mos.	177	4,896	....	4,951	5,787	607	744	61	1,212	1,605	463	212	1,947	4,405	4,960	89.0	85.7	546	312	1,242	1,457
Lehigh Valley	Sept.	1,130	4,513	200	5,025	5,693	553	806	94	922	990	214	136	2,491	4,332	4,830	86.2	84.8	692	439	—6	191
	9 mos.	1,130	38,427	2,038	43,022	51,342	5,544	6,609	889	7,633	9,671	1,835	1,308	22,689	39,331	44,525	91.4	86.7	3,691	3,952	—2,944	933
Long Island	Sept.	350	1,145	4,692	6,014	5,954	748	743	88	1,033	1,086	168	41	2,769	4,786	4,736	79.6	79.5	1,228	330	658	623
	9 mos.	350	9,606	39,601	50,991	50,009	7,116	6,904	884	9,815	9,547	1,514	288	25,485	44,470	42,763	87.2	85.5	6,521	3,132	1,523	1,932
Louisiana & Arkansas	Sept.	746	1,921	37	2,063	2,051	150	218	20	257	287	94	74	665	1,224	1,336	59.3	65.1	839	413	325	270
	9 mos.	746	16,658	380	17,976	19,876	1,670	1,969	238	2,617	2,888	881	703	6,027	11,716	12,441	65.2	62.6	6,260	2,825	2,234	2,959
Louisville & Nashville	Sept.	5,697	17,863	660	19,874	20,053	2,562	2,936	277	3,714	4,183	919	474	7,380	15,089	16,442	75.9	82.0	4,785	3,397	2,350	1,967
	9 mos.	5,697	146,319	6,545	165,244	182,919	24,143	27,428	2,588	34,627	40,129	9,546	4,454	68,075	139,811	152,123	84.6	83.2	25,434	19,220	12,856	18,039
Maine Central	Sept.	944	1,691	63	1,893	2,067	384	409	28	342	394	84	25	773	1,640	1,714	86.6	83.0	253	109	113	150
	9 mos.	944	17,190	661	19,028	20,528	3,416	3,959	253	3,397	3,667	757	242	7,316	15,411	16,518	81.0	80.5	3,617	1,686	1,281	1,541
Minneapolis & St. Louis	Sept.	1,391	1,935	1	2,022	1,775	297	298	31	277	310	78	113	614	1,437	1,420	71.1	80.0	585	289	221	152
	9 mos.	1,391	16,269	19	16,878	17,199	2,560	2,484	292	2,669	2,565	801	998	5,676	13,059	12,991	77.4	75.0	3,819	2,191	1,395	1,569
Minn., Northfield & Southern	Sept.	77	337	....	414	383	29	76	2	37	39	13	33	88	222	242	53.7	63.2	191	86	61	39
	9 mos.	77	3,154	....	3,406	3,602	207	562	21	348	396	115	269	764	1,994	2,162	55.9	60.0	1,501	801	581	539
Minn., St. Paul & S. S. Marie	Sept.	3,222	4,539	52	4,876	4,286	601	963	48	635	581	139	99	1,458	2,988	3,316	61.3	77.4	1,888	325	1,457	290
	9 mos.	3,222	29,515	617	31,993	36,057	5,958	7,733	437	5,825	6,295	1,238	951	12,441	26,979	29,286	84.3	81.2	5,014	2,489	2,016	2,327
Missouri-Illinois	Sept.	172	416	....	420	583	60	51	4	79	66	37	13	118	283	267	67.4	45.9	137	94	81	149
	9 mos.	172	3,524	....	3,550	4,491	612	475	35	789	748	335	118	1,009	2,637	2,544	74.3	56.7	913	707	579	978
Missouri-Kansas-Texas Lines	Sept.	2,919	4,422	95	5,032	5,486	527	900	89	1,032	871	261	182	1,756	3,713	4,214	73.8	76.8	1,319	300	399	425
	9 mos.	3,019	40,029	997	45,411	52,064	4,746	8,915	792	8,721	9,221	2,319	1,729	16,541	34,009	42,243	74.9	81.1	11,401	3,196	3,224	2,253
Missouri Pacific	Sept.	9,514	20,937	829	24,180	24,392	3,243	3,755	309	3,919	4,250	1,072	660	9,126	17,955	19,023	74.3	78.0	6,225	2,058	3,333	2,718
	9 mos.	9,549	187,025	7,946	214,737	225,138	32,187	34,545	2,780	37,215	39,298	9,538	6,087	82,770	167,234	172,860	77.9	76.8	47,503	14,253	23,742	26,961
Monon	Sept.	541	1,551	38	1,722	1,733	292	321	23	289	300	78	92	680	1,439	1,535	83.6	88.5	283	110	115	—2
	9 mos.	541	13,089	475	14,659	16,559	2,037	2,474	203	2,547	2,791	705	888	6,131	12,462	13,885	85.0	83.9	2,197	764	742	789
Monongahela	Sept.	177	345	....	348	535	61	71	13	55	63	11	1	150	278	337	79.7	63.0	70	24	—58	41
	9 mos.	177	3,441	....	3,468	4,734	597	688	108	501	578	100	9	1,434	2,652	3,191	76.5	67.4	816	219	—404	—8
New York Central	Sept.	10,521	41,740	6,000	56,351	58,471	5,439	8,274	1,178	9,700	10,361	2,514	1,060	26,691	45,665	49,649	81.0	84.9	10,686	5,380	4,048	1,721
	9 mos.	10,521	353,509	57,503	477,968	559,199	52,621	69,333	10,897	86,100	97,063	22,597	9,268	240,256	414,769	469,655	86.8	84.0	63,199	49,107	—2,271	24,663
Pittsburgh & Lake Erie	Sept.	221	2,650	37	2,831	3,629	457	476	43	949	1,014	307	58	1,006	2,650	2,987	93.6	82.3	180	559	738	805
	9 mos.	221	21,483	363	22,858	33,889	3,890	5,133	387	8,054	9,506	2,715	685	9,410	23,914	29,229	104.6	86.2	—1,056	2,302	5,022	7,387
New York, Chicago & St. Louis	Sept.	2,179	11,705	113	12,321	14,686	1,356	1,800	156	1,819	2,233	461	350	4,623	8,601	10,065	69.8	68.5	3,720	1,548	1,625	1,890
	9 mos.	2,179	97,434	1,236	102,257	130,294	11,647	15,044	1,673	17,144	22,214	4,034	3,170	40,941	77,177	93,083	75.5	71.4	25,080	11,208	9,647	14,605
New York, New Haven & Hartford	Sept.	1,762	6,785	3,941	12,444	13,547	1,357	1,614	329	1,941	2,198	479	204	5,728	10,096	10,802	81.1	79.7	2,349	969	112	290
	9 mos.	1,762	58,205	37,515	109,942	122,920	13,259	14,525	2,513	17,339	19,876	4,428	1,992	53,058	93,763	100,182	85.3	81.5	16,178	7,990	—4,009	1,557
New York Connecting	Sept.	21	369	....	401	266	89	114	25	10	12	....	....	81	184	215	46.0	81.1	216	91	117	—32
	9 mos.	21	2,676	....	2,868	2,876	1,057	908	228	145	149	....	....	785	2,021	1,888	70.5	65.6	847	808	—130	126
New York, Susquehanna & Western	Sept.	106	325	21	359	403	45	44	6	48	56	11	8	180	312	332	86.9	82.5	47	30	—27	—8
	9 mos.	114	2,727	250	3,093	3,815	355	410	54	485	520	103	58	1,613	2,777	3,163	89.8	82.4	315	274	—318	—37

(Continued on page 34)

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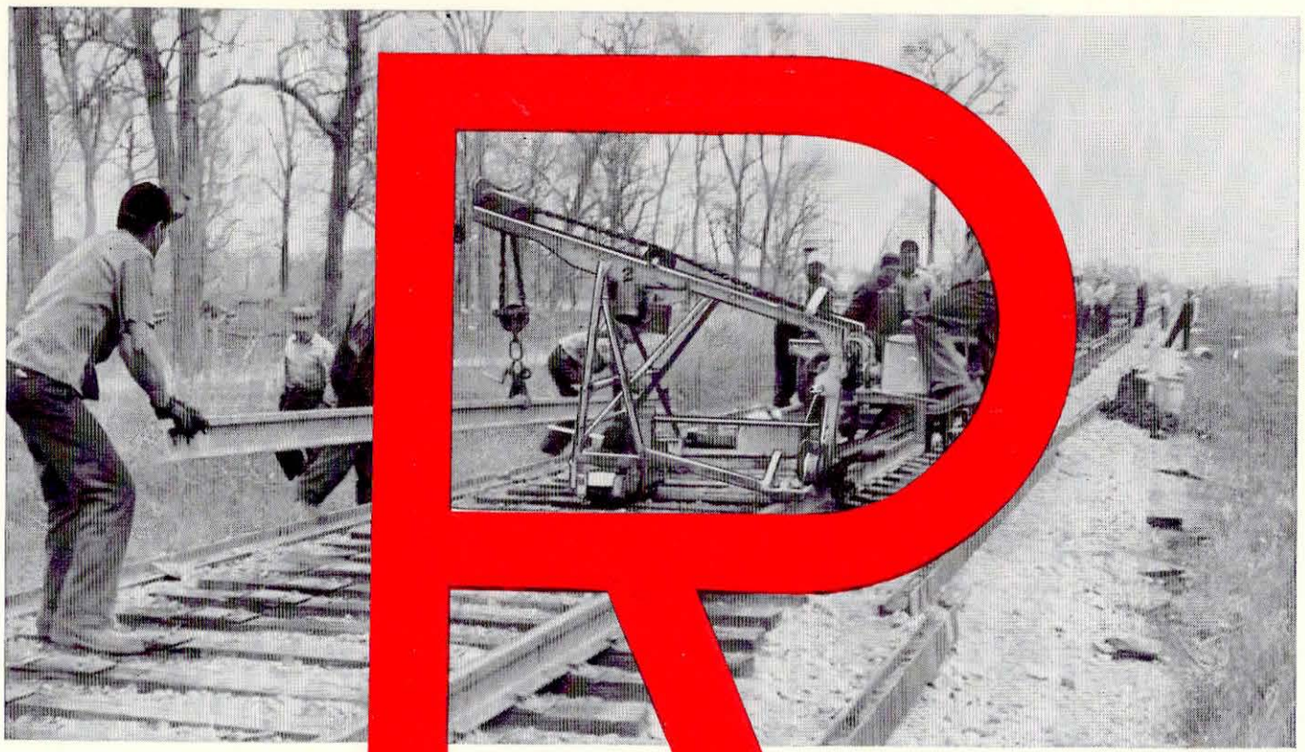
REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1958

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1958	1957	Operating Expenses: Maint. of Way and Structures: Total 1958	Total 1957	Deprec. and Retirements	Maint. Equipment: Total 1958	Total 1957	Deprec. and Retirements	Traffic	Transportation	Total 1958	Total 1957	Operating ratio 1958	1957	Net from railway operation	Railway tax accruals	Net Railway operating income 1958	1957
Norfolk & Western	Sept.	2,138	17,861	211	18,915	21,022	2,055	2,856	385	2,551	3,765	1,026	332	4,946	10,504	13,690	55.5	65.1	8,411	4,162	5,225	4,360
	9 mos.	2,132	142,039	2,165	151,724	192,498	19,647	25,825	2,968	29,122	37,483	9,293	3,192	45,500	103,800	129,934	68.4	67.5	47,924	24,996	27,561	33,295
Norfolk Southern	Sept.	604	949	....	965	937	244	203	25	123	127	33	49	290	763	715	79.0	76.3	203	79	80	77
	9 mos.	604	6,688	....	6,816	8,099	1,680	1,852	142	1,109	1,193	299	437	2,264	5,992	6,548	87.9	80.9	824	479	62	559
Northern Pacific	Sept.	6,828	17,148	468	18,715	17,086	2,196	2,254	259	2,486	2,740	730	377	6,228	12,195	12,464	65.2	72.9	6,521	3,518	2,860	2,309
	9 mos.	6,828	117,476	4,628	131,405	138,669	17,699	21,263	2,611	24,380	25,536	6,438	3,592	51,282	105,228	113,996	80.0	82.2	26,176	16,355	12,271	12,402
Northwestern Pacific	Sept.	328	1,182	3	1,200	1,038	222	210	23	87	102	2	9	353	698	709	58.1	68.3	503	208	119	32
	9 mos.	329	8,889	28	9,013	9,440	2,246	2,191	174	717	859	23	71	2,929	6,200	6,391	68.8	67.7	2,814	863	424	554
Pacific Electric	Sept.	358	972	....	1,135	1,151	157	180	25	53	65	4	22	501	832	975	73.3	84.7	303	111	76	—68
	9 mos.	361	8,259	....	9,506	11,273	1,499	1,714	219	532	566	31	175	4,569	7,783	8,983	81.9	79.7	1,723	981	—203	15
Pennsylvania	Sept.	9,940	57,433	8,164	74,340	84,263	7,363	10,315	1,429	13,519	17,520	2,759	1,151	32,666	58,738	70,413	79.0	83.6	15,602	5,368	4,001	5,239
	9 mos.	9,943	466,457	80,035	617,953	755,226	68,344	87,235	12,701	122,700	155,789	26,756	10,863	298,023	536,321	633,635	86.8	83.9	81,631	46,860	—318	39,702
Penn.-Reading Seashore Lines	Sept.	358	616	126	773	857	179	217	27	126	116	27	11	499	874	901	113.2	105.2	—102	68	—333	—239
	9 mos.	358	4,954	1,078	6,233	7,210	1,840	1,966	243	1,095	1,061	241	88	4,391	7,827	8,166	125.6	113.3	—1,594	610	—3,593	—3,295
Piedmont & Northern	Sept.	126	451	....	459	427	58	48	13	30	32	9	28	83	234	227	51.0	53.1	225	103	76	58
	9 mos.	126	3,635	....	3,725	3,876	437	411	66	255	281	81	254	736	1,978	1,982	53.1	51.1	1,747	844	519	557
Pittsburgh & West Virginia	Sept.	132	637	....	640	809	135	126	29	139	127	46	72	217	625	603	97.6	74.5	16	Cr.35	50	118
	9 mos.	132	5,851	....	5,906	7,612	1,214	1,112	230	1,330	1,230	418	688	1,959	5,703	5,476	96.6	71.9	203	Cr.100	325	1,198
Reading	Sept.	1,303	7,768	513	8,830	10,898	1,029	1,754	196	1,421	2,231	489	178	3,588	6,677	8,933	75.6	82.0	2,153	740	1,127	1,371
	9 mos.	1,303	68,670	4,823	78,716	103,403	10,864	14,258	1,757	14,220	19,619	4,427	1,725	36,275	67,305	82,175	85.5	79.5	11,411	2,487	6,065	12,058
Richmond, Fred. & Potomac	Sept.	118	1,171	328	1,751	2,025	138	212	27	257	320	67	28	662	1,218	1,403	69.6	69.3	533	315	159	280
	9 mos.	118	11,969	3,946	18,145	20,496	1,470	2,101	242	2,527	2,949	605	274	6,516	12,147	13,519	66.9	66.0	5,998	3,154	2,034	2,404
Rutland	Sept.	391	387	....	415	447	82	80	8	49	59	18	28	153	339	360	81.6	80.5	76	28	42	47
	9 mos.	391	3,199	....	3,423	3,871	653	774	75	509	543	158	282	1,409	3,091	3,318	90.3	85.7	332	251	40	195
St. Louis-San Francisco	Sept.	4,577	8,954	285	9,964	9,926	1,379	1,316	149	1,792	1,722	609	324	3,714	7,790	7,900	78.2	79.6	2,174	746	1,335	951
	9 mos.	4,589	74,350	2,388	82,946	90,114	11,796	12,447	1,441	14,273	15,094	5,492	3,079	34,062	68,495	73,309	82.6	81.4	14,451	5,550	8,006	8,373
St. Louis-San Fran. & Texas	Sept.	143	328	3	359	359	40	30	4	22	24	1	22	141	237	235	66.0	65.4	122	40	26	29
	9 mos.	143	3,020	22	3,269	3,362	394	358	12	219	270	10	214	1,331	2,266	2,474	69.3	73.6	1,003	315	169	103
St. Louis Southwestern Lines	Sept.	1,556	5,153	8	5,256	5,309	726	665	72	702	756	185	194	1,651	3,445	3,367	65.6	63.4	1,811	776	938	746
	9 mos.	1,557	43,115	73	44,087	49,374	6,236	6,327	659	6,171	6,761	1,654	1,705	14,622	30,324	31,875	68.8	64.6	13,763	5,427	6,494	7,064
Savannah & Atlanta	Sept.	144	295	....	310	334	60	107	2	57	56	19	16	101	246	289	79.2	86.4	65	19	37	33
	9 mos.	144	2,730	2	2,835	3,012	529	652	14	514	504	174	143	910	2,206	2,305	77.6	76.5	629	216	373	452
Seaboard Air Line	Sept.	4,146	10,306	836	12,025	12,296	1,522	1,548	204	2,416	2,406	707	438	4,515	9,520	9,458	79.2	76.9	2,505	933	1,514	1,696
	9 mos.	4,127	95,965	9,792	114,145	123,382	16,209	17,286	1,930	22,935	22,924	6,249	4,001	42,268	91,554	92,864	80.2	75.3	22,591	7,982	13,341	16,201
Southern Railway	Sept.	6,273	20,180	868	22,696	20,328	3,361	2,939	351	3,769	3,851	945	478	7,071	15,886	15,539	70.0	76.4	6,811	3,141	3,525	3,253
	9 mos.	6,273	164,283	8,741	186,997	199,074	27,607	27,543	2,743	32,291	36,730	8,470	4,356	62,782	138,047	144,390	73.8	72.5	48,950	18,065	26,700	29,546
Alabama Great Southern	Sept.	328	1,137	39	1,313	1,348	248	249	34	278	308	81	42	469	1,144	1,200	87.2	89.1	169	92	77	109
	9 mos.	328	10,057	412	11,615	13,761	2,213	2,409	313	2,720	2,970	727	371	4,233	10,504	11,359	90.4	82.5	1,111	873	108	1,213
Cinn., New Orleans & Tex. Pac.	Sept.	337	2,482	79	2,751	3,200	598	513	68	683	710	219	83	864	2,422	2,389	88.1	74.6	328	256	202	611
	9 mos.	337	24,082	886	26,695	31,530	5,353	5,053	657	6,069	6,227	1,915	749	7,796	21,726	22,029	81.4	69.9	4,970	2,453	3,562	5,884
Georgia Southern & Florida	Sept.	397	633	24	727	647	159	199	10	77	83	11	21	256	573	626	78.8	96.8	154	38	—51	—178
	9 mos.	397	5,860	396	6,856	7,000	1,409	1,850	157	717	751	95	197	2,416	5,275	5,891	76.9	84.2	1,581	346	—391	—683
New Orleans & Northeastern	Sept.	203	854	26	954	1,007	175	195	23	193	149	77	25	251	719	681	75.4	67.6	235	97	164	130
	9 mos.	203	7,671	301	8,591	9,420	1,636	1,798	188	1,776	1,464	609	222	2,186	6,477	6,345	75.4	67.4	2,114	1,143	990	1,132
Southern Pacific	Sept.	8,082	42,524	2,152	47,169	44,345	5,899	5,535	1,077	9,997	9,650	2,391	804	17,553	36,414	35,944	77.2	81.1	10,754	4,839	5,033	3,811
	9 mos.	8,089	336,302	22,007	380,358	394,085	46,943	49,112	5,170	83,383	87,835	21,549	7,271	148,983	306,154	322,866	80.5	81.9	74,204	33,970	34,686	33,106
Texas & New Orleans	Sept.	4,218	10,450	271	11,349	11,716	2,197	1,871	588	1,643	1,529	188	259	4,046	8,717	8,576	76.8	73.2	2,632	926	644	793
	9 mos.	4,275	92,146	2,778	100,725	104,978	17,024	17,748	2,119	14,333	13,500	1,657	2,301	37,483	76,464	78,065	75.9	74.4	24,261	9,366	4,849	6,350
Spokane International	Sept.	150	314	....	324	291	26	37	3	28	31	16	6	82	158	161	48.9	55.4	165	72	65	65
	9 mos.	150	2,887	....	2,968	2,855	497	531	35	291	282	95	56	742	1,721	1,701	58.0	59.6	1,248	487	527	560
Spokane, Portland & Seattle	Sept.	936	2,850	80	3,109	2,784	423	377	81	480	438	128	33	1,135	2,191	1,983	70.5	71.2	917	527	248	444
	9 mos.	941	21,855	757	24,120	23,901	3,925	3,736	643	4,087	3,973	1,154	306	8,923	18,325	17,965	76.0	75.2	5,795	2,367	2,823	2,735
Tennessee Central	Sept.	286	351	2	372	458	41	70	5	53	63	22	19	120	261	303	70.4	66.1	110	24	46	77
	9 mos.	286	2,873	6	3,010	3,484	372	651	52	444	575	200	165	1,026	2,254	2,757	74.9	79.1	756	207	196	110
Texas & Pacific	Sept.	1,831	4,994	279	5,856	5,966	774	789	96	1,061	990	271	196	2,400	4,783	4,644	81.7	77.8	1,073	396	467	481
	9 mos.	1,831	45,647	2,713	53,490	58,905	7,328	8,565	864	9,540	9,916	2,407	1,765	21,694	43,459	45,713	81.2	77.6	10,031	3,673	2,699	4,440
Texas Mexican	Sept.	161	258	....	280	364	69	55	6	38	38	11	12	88	234	205	83.6	56.2	46	10	—7	54
	9 mos.	161	2,607	....	2,852	2,824	528	491	53	303	283	96	109	767	1,907	1,818	66.9	64.4	944	395	231	256
Toledo, Peoria & Western	Sept.	239	609	....	633	645	85	115	—3	50	50	12	51	153	378	413	59.7	64.0	255	116	77	68
	9 mos.	239	5,389	....	5,539	5,729	689	703	42	482	495	108	448	1,391	3,374	3,483	60.9	60.8	2,165	868	726	672
Union Pacific	Sept.	9,748	42,142	2,210	47,503	45,088	5,844	5,376	526	8,089	7,058	1,886	1,096	15,691	32,962	31,094	69.4	69.0	14,541	6,661	5,639	4,684
	9 mos.	9,751	318,783	21,595	366,454	384,309	48,931	51,112	5,994	68,160	71,310	16,871	10,617	127,229	274,845	286,153	75.0	74.5	91,609	48,504	28,167	27,700
Virginian	Sept.	608	3,986	....	4,140	5,361	470	604	62	536	648	286	61	784	1,970	2,304	47.6	43.0	2,170	1,174	1,220	1,615
	9 mos.	608	35,279	....	36,854	49,449	4,051	5,109	579	6,026	6,271	2,535	528	7,375	19,110	21,742	51.9	44.0	17,744	8,982	10,032	15,113
Wabash	Sept.	2,392	7,911	392	9,219	10,138	1,087	1,339	120	1,432	1,513	453	333	4,390	7,683	8,246	83.3	81.3	1,535	323	449	865
	9 mos.	2,392	70,928	3,449	81,700	93,000	9,756	10,837	862	12,964	13,623	4,036	3,130	38,239	68,038	72,725	83.3	78.2	13,661	4,277	3,177	7,361
Ann Arbor	Sept.	294	722	....	738	806	89	95	7	141	171	44	31	351	636	690	86.1	85.7	103	39	44	66
	9 mos.	294	6,363	....	6,519	7,186	720	863	59	1,384	1,493	380	288	3,175	5,786	6,110	88.8	85.0	733	425	184	369
Western Maryland	Sept.	844	3,864	....	4,053	4,665	534	618	49	756	813	275	113	1,257	2,856	3,119	70.5	66.9	1,197	602	906	1,118
	9 mos.	845	31,460	....	33,170	41,737	4,647	5,450	511	6,789	7,256	2,497	1,055	11,078	25,559	28,921	77.1	69.3	7,612	3,482	6,356	9,253
Western Pacific	Sept.	1,192	4,803	163	5,102	4,742	510	885	86	619	634	216	200	1,587	3,202	3,636	62.8	76.7	1,900	777	968	524
	9 mos.	1,192	35,234	1,852	38,080	41,887	5,145	6,605	718	5,993	5,830	1,943	1,906	13,579	29,202	30,865	76.7	73.7	8,878	2,907	5,248	5,613
Wisconsin Central	Sept.	1,031	2,667	30	2,902	3,062	302	449	42	391	397	109	88	1,174	2,101	2,168	72.4	70.8	801	168	474	504
	9 mos.	1,031	22,096	327	23,885	26,160	3,042	4,246	389	3,955	4,158	936	835	10,273	19,445	21,000	81.4	80.3	4,440	1,633	1,424	1,884



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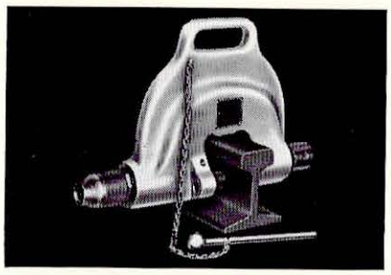


VELOCITY POWER RAIL PUNCH
Takes only an instant to punch clean, smooth hole for track bolts or rail bonds. Needs no electricity, compressed air, hydraulic power; operates from small blank cartridge; no open flash or recoil. Only one major moving part, the piston.

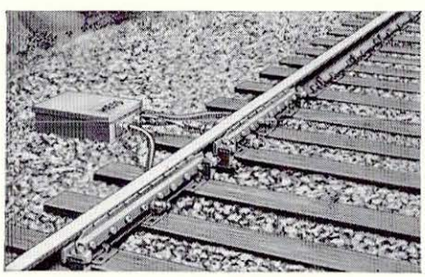
MECO POWER RAIL LAYER

Makes new records in Time Saving! This machine greatly speeds up the laying of rails of every weight and length. Makes new records in Economy! The Meco Power Rail Layer is inexpensively operated by a standard 4-cycle power unit, usually with a machine crew of 3 or 4 men.

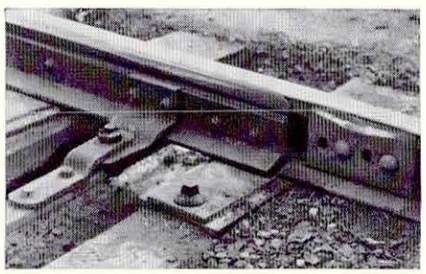
A Meco easily sets in the rails for a large gang of 100 men or more. And—the first cost is only a fraction of that for other rail laying machines.

★ **Maintenance Equipment Company** ★
Division of Poor and Company
RAILWAY EXCHANGE BUILDING · CHICAGO 4, ILLINOIS

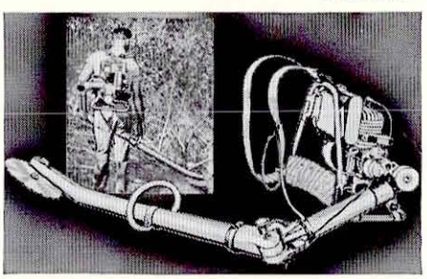
R-996RRRR



MECO RAIL AND FLANGE LUBRICATOR
Doubles to quadruples curve rail and locomotive wheel flange life, by reducing friction between rails and wheel flanges on curves. Also makes possible higher speeds with greater safety.

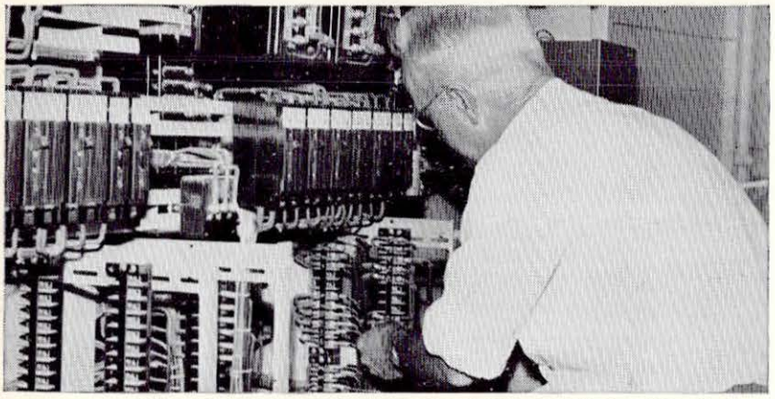


MACK REVERSIBLE SWITCH POINT PROTECTOR
Prolongs the life of switch rails about 4 times; then is reversed and again extends the switch rail life for another similar period.

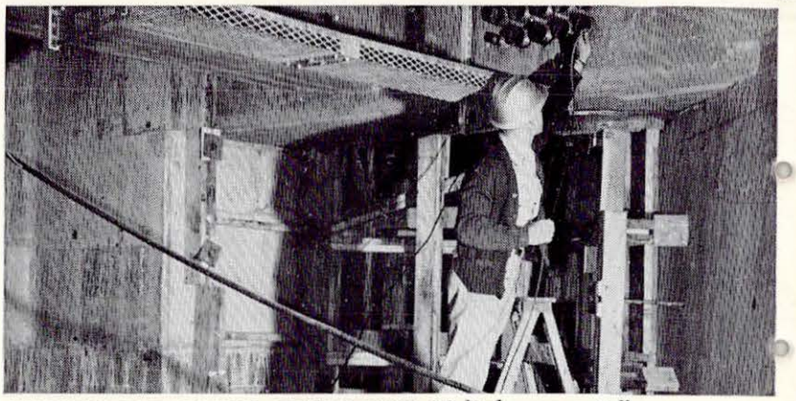


BRUSH CUTTER
Cuts right-of-way maintenance costs. One operator with the new, light-weight, Southworth can do the work of eight men using brush hooks or scythes. Extreme maneuverability, "work horse" power, light-weight are important advantages.

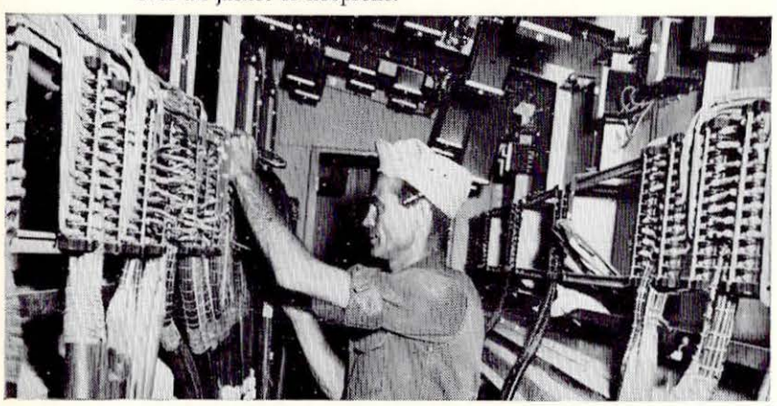
Match the conditions on your road with these Anaconda Control Cables



ANACONDA TYPE ANW-RUBBER-INSULATED CONTROL CABLE. Peak reliability, outstanding heat resistance. Cable is also highly resistant to moisture, acids, alkalies, other chemicals. Unusual overload capacity and long-aging characteristics. Individual conductor covering and over-all jacket of neoprene.



ANACONDA THERMOPLASTIC CONTROL CABLE. Multiple-use: aerially, in conduit, underground in ducts, direct burial in earth. Available with polyethylene (600 or 1000 volts) or Densheath* vinyl resin (600 volts) insulation and Densheath over-all jacket. Densheath jackets over polyethylene-insulated conductors on request.



ANACONDA BUTYL-INSULATED CONTROL CABLE. Ozone-resistant control cable. Individual conductor covering and over-all jacket of neoprene provide maximum insurance against moisture, mechanical injury. High-quality product with outstanding performance record.

ANACONDA TYPE PND CONTROL CABLE. For general-purpose use where space is limited. Allows installation of a 12-conductor cable in conduit carrying a 6 or 7. Individual conductor covering of abrasion-, oil-, gasoline-resistant nylon. Over-all Densheath jacket.

APPLICATION CHART FOR ANACONDA CONTROL CABLE

TYPE AND VOLTAGE RATING	CHARACTERISTICS	GENERAL APPLICATIONS	INSTALLATION METHODS
RUBBER—Insulated Control Cables			
Rubber-Insulated 600-Volts	Excellent moisture, heat resistance. Long-aging.	General-purpose and station control requirements.	Installed aerially, in conduit, underground in ducts—or buried directly in earth.
Ozone-Resistant Rubber—Insulated 600-Volts	Ozone-resistant. Proved moisture resistance, heat stability. Long-aging.		
THERMOPLASTIC—Insulated Control Cables			
Polyethylene-Insulated 600-Volts	Excellent moisture and chemical resistance. Highly resistant to electroendosmosis. Long-lived.	General-purpose control requirements.	Installed aerially, in conduit, underground in ducts—or buried directly in earth.
DENSHEATH®-Insulated 600-Volts	Thermoplastic cable. Excellent moisture and chemical resistance. Long-aging.		
Anaconda Type PND* Polyethylene-Insulated-Nylon Conductor Cover 600-Volts**	Dependable chemical and abrasion resistance. Small diameter. Long-aging.	General-purpose control requirements where space is a limiting factor.	Installed aerially, in conduit or underground in ducts.
Polyethylene-Insulated 1000-Volts	Peak moisture and chemical resistance. Heavy insulation thickness. Long-aging.	Station control requirements.	Installed aerially, in conduit, underground in ducts—or buried directly in earth.

**IPCEA voltage rating is 300 volts.
*Trademark.
Lead sheaths furnished on rubber-insulated control cables if requested.
Interlocked armor available for all types of control cable.

For full facts on any of Anaconda's complete line of control cables – including cables engineered for more specialized control requirements – see the Man from Anaconda. A comprehensive technical booklet on Anaconda Control Cables is yours for the asking. Write: Anaconda Wire & Cable Company, 25 Broadway, New York 4, N. Y. 58340R

*Reg. U.S. Pat. Off.

GEARED TO PROGRESS P I MEMBER

SEE THE MAN FROM **ANACONDA**®
FOR **CONTROL CABLE**

MARKET OUTLOOK *at a glance*

Carloadings Drop 12.9% During Holiday Week

Loading of revenue freight in the holiday week ended Nov. 29 totaled 539,191 cars, the Association of American Railroads announced on Dec. 4. This was a decrease of 80,159 cars, or 12.9%, compared with the previous week; a decrease of 14,531 cars, or 2.6%, compared with the corresponding week last year; and a decrease of 212,955 cars, or 28.3%, compared with the equivalent 1956 week.

Loadings of revenue freight for the week ended November 22 totaled 619,350 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, November 22

District	1958	1957	1956
Eastern	94,433	99,940	103,478
Allegheny	113,928	123,646	129,783
Pocahontas	54,079	56,212	52,574
Southern	117,943	111,829	111,135
Northwestern	66,201	71,578	91,665
Central Western	124,492	122,942	112,995
Southwestern	49,274	46,616	48,990
Total Western Districts	239,967	241,136	253,650
Total All Roads	619,350	632,763	650,620
Commodities:			
Grain and grain products	52,924	50,650	41,595
Livestock	6,199	8,207	8,663
Coal	122,175	129,934	127,760
Coke	8,798	9,154	12,685
Forest Products	37,477	34,026	35,784
Ore	27,599	28,115	47,233
Merchandise l.c.l.	44,326	49,952	49,590
Miscellaneous	319,852	322,725	327,310
November 22	619,350	632,763	650,620
November 15	643,795	647,297	763,898
November 8	658,086	675,579	772,850
November 1	674,477	713,994	800,367
October 25	674,264	703,688	816,803
Cumulative total, 47 weeks	27,481,115	32,725,538	34,451,809

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Nov. 22 totaled 6,748 cars, compared with 4,926 for the corresponding 1957 week. Loadings for 1958 up to Nov. 22 totaled 248,438 cars, compared with 228,443 for the corresponding period of 1957.

IN CANADA.—Carloadings for the seven-day period ended November 14 totaled 73,023 cars, compared with 77,921 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
November 14, 1958	73,023	26,871
November 14, 1957	78,187	28,869
Cumulative Totals:		
November 14, 1958	3,329,945	1,230,919
November 14, 1957	3,589,741	1,437,146

New Equipment

PASSENGER-TRAIN CARS

► *New York Transit Authority.*—Will order 200 new cars for the BMT subway line in 1959, subject to approval by the Board of Estimate. Meanwhile, the authority has signed a contract with the American Car and Foundry Division, ACF Industries, for 110 new IRT subway cars costing $11,726,000. A feature of the IRT cars will be easy-to-maintain seats made of molded Fiberglas.

► *Union Pacific.*—Ordered five additional coaches from St. Louis Car Co. at an estimated cost of more than $700,000. This brings the total UP order to 35 cars, costing a total of approximately $5,600,000 (RA, Aug. 18, p. 35).

FREIGHT-TRAIN CARS

► *Minneapolis & St. Louis.*—Plans to equip 15 flatcars with bulkheads at Marshalltown shops in 1959.

► *Northern Pacific.*—Will spend about $12,000,000 on 1959 freight car acquisition program. NP will build (at Brainard, Minn., shops) 400 40-ft box cars and 100 50-ft insulated box cars with damage prevention loading devices, plus 400 50-ft box cars and another 100 50-ft loader-equipped insulated box cars not completed this year. Fifty mechanical refrigerator cars will be purchased from an outside carbuilder. An additional 500 freight cars may be built later in 1959 (at a cost of $4,000,000) if business conditions warrant.

SPECIAL

► *Brazilian Railways.*—Ordered air brake equipment costing $4,300,000 from the Air Brake Division, Westinghouse Air Brake Co. Order includes equipment for 80 passenger cars, 70 locomotives and 10,300 freight cars. Delivery will start this month.

New Facilities

► *Chicago Transit Authority.*—Recommended provision for $31,500,000 of public funds in the 1959-61 biennium to finance planning and initial construction stages of top-priority CTA extension and improvement projects. Major priority work (in a 20-year program) includes construction of rapid transit lines in the median strip of two expressways and installation of signal and train control systems in unsignaled areas.

► *Grand Trunk Western.*—Will convert steam locomotive shops to a diesel facility at Battle Creek, Mich., at an estimated cost of $1,200,000. The project will provide heavy repair shop for diesels, plus facilities for terminal diesel servicing and repairs.

► *Great Northern.*—Plans to add 171 miles to its CTC system in 1959. The new installation, in Minnesota and Montana, will bring GN's CTC total to 542 miles.

► *Louisville & Nashville.*—Authorized installation of centralized traffic control on 125 miles of track between Mobile, Ala., and New Orleans, La. Estimated cost: $2,600,000. Project will involve construction of nine new passing tracks to accommodate up to 200 cars each. Work will begin in March 1959, will be completed late in 1960.

One Car for Commuters and Cargo?

Connect the major commuter roads, advises Northwestern University's Berge, then run fast merchandise trains during off-peak hours—using the same cars for commuters, package freight and mail-express.

► **The Story at a Glance: Commuter cars carrying passengers during morning and evening rush hours. The same commuter cars carrying merchandise, mail and express during daylight off-peak hours and at night. That's part of the latest proposal tossed into the "how-do-we-save-the-commuter-business" debate. Its author: Stanley Berge, professor of transportation at Northwestern University.**

Mr. Berge's hybrid cars—equipped with collapsible seats and removable cargo fasteners—would operate over a coordinated network of suburban rail lines, the major ones (eventually) electrified. He sees the switch to dual-purpose cars as "probably the only way to put railroad commuter equipment on a sound financial basis."

Connecting the city's principal commuter roads and operating them, off-peak, for fast, through-route merchandise service is his answer to the problem of commuter facility and equipment utilization. Public aid (not public subsidy) would finance the capital expenditures needed to put such a system in operation.

Like many a railroad man, Professor Stanley Berge pinpoints poor utilization of plant as the biggest barrier to a profitable commuter service: How can the railroads better utilize an expensive plant which normally stands idle except for two daily peak periods?

His solution wraps up an old idea with a new twist—link the major suburban lines into a coordinated network, then run high-speed merchandise-mail-express trains over the system during the midday and nighttime commuter lull. The railroads would be electrified. Their equipment would be dual-purpose cars, "with comfortable but collapsible light-weight seats and removable cargo fastening devices for containers and other non-passenger payloads."

The Northwestern transportation professor would revamp suburban operations (applied to Chicago conditions) this way:

- Decide which rail lines are the really strategic ones. Then forge these lines into a coordinated system of high-speed routes by building essential track connections. Two new lines—one linking Union Station with the C&NW Station, the other joining the C&NW with the IC and the CSS&SB—would do the job.
- Make the transportation service over the resulting through routes "invincible by applying the most modern operating techniques and automatic remote controls applicable to high-speed electric railways."
- Design the system "to utilize its plant, not 20 hours a week, but 24 hours a day. This means we must arrange to operate fast metropolitan merchandise, mail and express trains as well as commuter trains over these high-speed through routes. By combining the revenues from merchandise, mail and express with commuter and other passenger revenues, I think we can forever solve the economic riddle of railroad commuter service . . ."
- Use dual-purpose cars for both passenger and freight transportation. The basic idea, according to Mr. Berge, "has long been a feature of military transport aircraft and . . . has been successfully employed by some of the European airlines. Just as it will doubtless become an economic necessity for our airlines to develop dual-purpose jet transport aircraft—to carry passengers by day and packages by night—just so, I believe, it is imperative for us to design and build dual-purpose railroad commuter cars . . . Let the cars carry commuters when commuters will travel, and move mail and packages during non-commuter hours."

Mr. Berge's proposal to connect Chicago's suburban roads would link four of the five biggest commuter operations—C&NW, IC, Milwaukee and Burlington. It would also eliminate stub-end terminal operations involving all four roads at present. Rock Island would become a part of the system if its commuter service should be transferred into either Union or IC terminals in Chicago's proposed railroad terminal consolidation.

Electrification of suburban lines would begin with the North Western's Chicago-Milwaukee tracks. A three-mile, double-tracked tunnel would link the C&NW with the already-electrified IC and CSS&SB operation.

Financing of these improvements would be done publicly—and Mr. Berge makes a definite distinction between public aid and public subsidy. Long term loans, leases or other contractual arrangements would be employed "instead of public handouts, to assist in the development of such major improvements . . . as hold promise of being clearly able to support themselves after an initial developmental period." Mr. Berge also recommends tax relief for metropolitan rail lines, to put them on equal footing with tax-free metropolitan highways and airports.

His proposals for commuter relief coincide only in part with those of the five major commuter roads. The carriers also want tax relief—but they've made no plea for public aid in financing improvements. Instead, the roads have proposed (to the Illinois Mass Transportation Commission) that regulation be eased.

In N. J.: A $190 Million Question

Hope for an early solution to the New Jersey-New York City commuter problem faded last week as the New Jersey Assembly ended public hearings, seemingly without agreeing on a course of action.

Two possible solutions—one establishing a bi-state transit district, the other throwing the problem into the lap of the existing bi-state Port of New York Authority—were in bill form, but neither seemed likely to pass (RA, Dec. 1, p. 40).

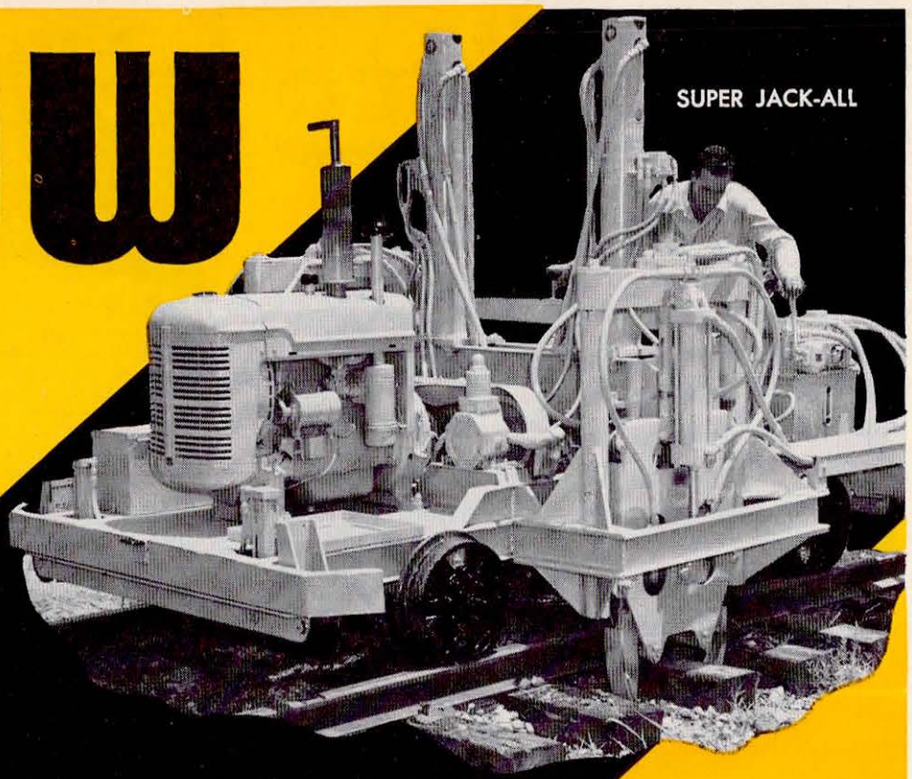
A new note in the hearings was discussion of physical details of a plan to use the Hudson & Manhattan Railroad as the major portion of a loop connecting N.J. commuter lines with New York subways. This plan, outlined last winter but not in detail, was presented to the Assembly committee by H&M Trustee H. T. Stichman. It differs from the Metropolitan Rapid Transit Commission loop proposal by using H&M facilities and in cost: $500,000,000 for the MRTC plan, $190,000,000 for the Stichman proposal.

Mr. Stichman's proposal involves building a new Hudson River tunnel to link mid-town Manhattan with Weehawken, N. J.; new tracks connecting H&M tubes and New York subways in Manhattan; additional trackage in New Jersey to connect the H&M with the New York Central's West Shore line at Weehawken and the Jersey Central Terminal at Communipaw; and building rail facilities over Bayonne Bridge to give the Staten Island Rapid Transit a direct rail link with Manhattan.

Operationally Mr. Stichman's proposal involves running tube trains over New York City's Lexington and Sixth Avenue subways from existing H&M terminals, then through the new tunnel to Weehawken and over a new route to the H&M tracks at Journal Square. With a spur to the Jersey Central and the existing trackage to Pennsylvania Station in Newark, all of New Jersey's passenger railroads would then have direct rail connections to Manhattan, which would make possible discontinuance of heavily-losing ferries.

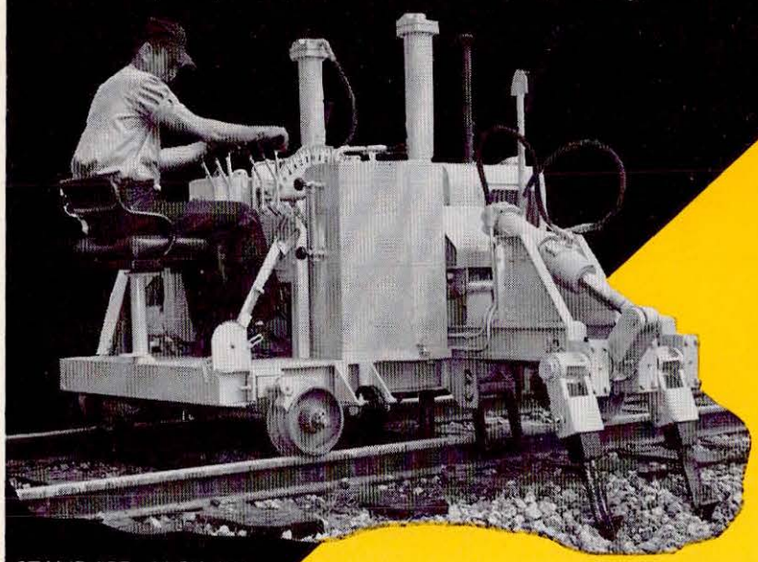
now

2 GREAT 1959 MODELS



SUPER JACK-ALL

KERSHAW JACK-ALLS



STANDARD JACK-ALL

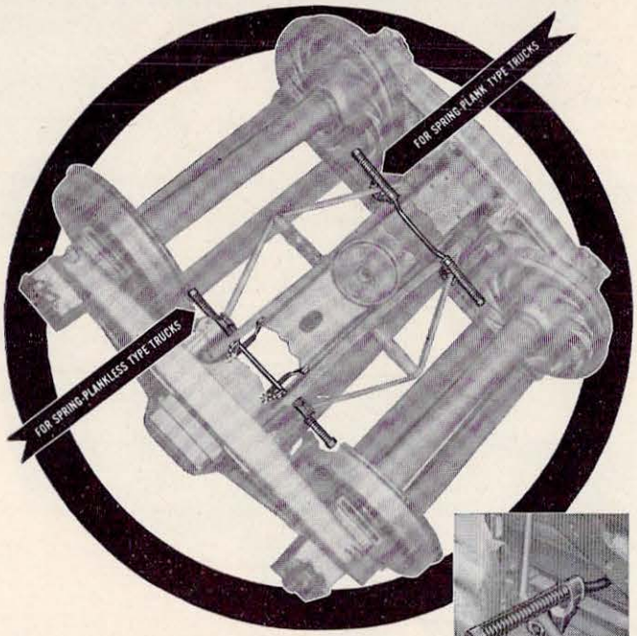
Now Kershaw presents two great new 1959 model Jack-Alls, fully tested and proven, to give you maximum production and maximum quality in your track maintenance operations. Both have many exclusive features found in no other jack-tamper. ● The Kershaw Super Jack-All is designed for high production and light raises ahead of tampers. The Kershaw Standard Jack-All, designed for maximum raises, as introduced in 1954 and is the first jack-tamper ever offered on the market. It is ideal for heavy ballasting programs or raising ahead of timbering gangs. ● And either Kershaw Jack-All may be used with ANY surfacing device. Put both of these great Kershaw Jack-Alls in your 1959 budget now!

FEATURES

- ★ Tamps on sides of ties.
- ★ Equipped with tie finder.
- ★ Rail dogs automatically go under base of rail.
- ★ Machine is firmly clamped to rail when jacking and tamping.
- ★ Tamping feet actually go under tie.
- ★ Jack frame is fastened to machine frame.
- ★ Tamping heads move on vertical guide.
- ★ Effectively tamps dirt, cinders, chats, slag, stone, pit-run gravel or any other type ballast.
- ★ Special tamping feet provided for various types ballast and various raises.
- ★ Track is jacked inside rail and tamped outside.

KERSHAW
MANUFACTURING CO. INC.
MONTGOMERY K **ALABAMA**

THE IMPROVED GRIPCO
BRAKE BEAM SAFETY SUPPORT



SPRING-PLANK TYPE

SPRING-PLANKLESS TYPE
(Safety Loops Included)

The Gripco Brake Beam Safety Support provides the greatest safety at lowest cost. Its dependability has been proven over years of actual service. Gripco Safety Supports are low in original cost, low in application cost and low in maintenance cost, even after years of service.

ENGINEERING IMPROVEMENTS

1. One design fits both 5'-6" and 5'-8" wheel base trucks.
2. One rod length and one spring length. One interchangeable casting fits both spring plank and spring plankless trucks.
3. Ideal for interchange repairs. New design permits easy and fast applications under all conditions. Nuts need not be removed to apply or remove the support.

OUTSTANDING FEATURES

1. An inexpensive trouble-free support for Rebuilt Car Programs.
2. Designed for spring plank and spring plankless trucks. Spring plankless trucks require safety loops which can be bolted, riveted or welded to the bolster.
3. Supports the brake beam in the event of brake beam or hanger failure.
4. Holds brake beam in horizontal position.
5. Holds brake shoe in proper position in relation to the periphery of the wheel.
6. The brake release feature pulls brake shoes away from wheel contact instantly when brakes are released.
7. Prevents unnecessary wheel and shoe wear caused by dragging brake shoes.
8. GRIPCO supports can be removed and reapplied without removing nuts; therefore nuts are furnished in proper position.
9. Brake beams, rods, and levers are held in position under spring tension thus reducing false movements, chattering and wear of hangers, hanger pins and brake heads.
10. Can replace as a billable repair any support except A.A.R. recommended practice (angle-riveted and welded).

A.A.R. APPROVED—PATENTED AND PATENTS PENDING

OTHER GRIP NUT PRODUCTS AD NO. 110

Grip Lock Nut #1 | Grip Holding Nut #2 | Railroad Gripco Lock Nut #3

GRIP NUT COMPANY

Serving American Railroads Since 1904

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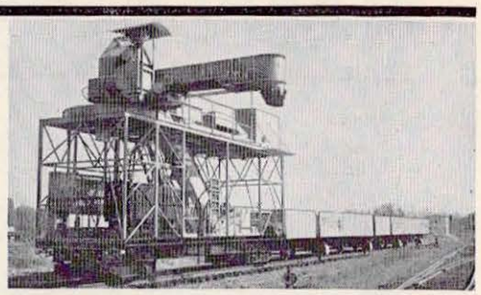
The NEW LEADER in BUNKER ICING MACHINES

BRINGS YOU MAJOR SAVINGS

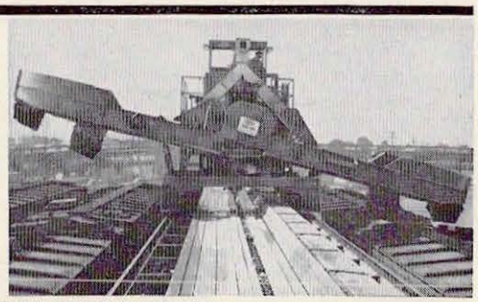
Great new improvements offered by Conveyco BUNKER ICING machines are producing tremendous savings in both initial installation and in operating costs for ice companies and railroads.

CONVEYCO machines with twin drum ice breakers reduce 300 lb. or 400 lb. blocks of ice to smaller bunker ice sizes with amazing uniformity and a minimum of wasteful fines. Fast two-man operation — one operator and helper — reduces costs. Write for complete money-saving story of "on-the-job performance" now.



RAIL MOUNTED ICER

A complete self-propelled unit that ices refrigerator cars from an adjoining track. Carries own ice supply. Eliminates breaking up of long trains to ice cars. Saves time and money.



TWIN DRUM DOCK ICER

A fast two-man machine with automatic salting unit that ices and salts bunkers simultaneously. Ice is delivered to both hatches of a bunker at same time. Requires lighter dock construction than any other comparable machine — also is faster and more efficient.

TRUCK MOUNTED ICER

Speeds icing of cars located on sidings or in yards. Saves time of shuttling cars in and out of ice house docks. Also valuable where ice house is far from loading point. Used effectively for icing cold storage bunkers. Owners report savings of as much as 70%.

Put efficiency in your bunker icing operations and show profits with a Conveyco machine. ***Call or write for complete details today.***

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ENGINEERS AND MANUFACTURERS

3260 E. Slauson Ave. • Los Angeles 58, Calif.

Ralph E. Clark
AAR

John W. Hawthorne
ACL

M. L. Smith
MP

J. A. Austin
MP

People in the News

ASSOCIATION OF AMERICAN RAILROADS.—Ralph E. Clark, manager, Closed Car Section, Car Service Division, Washington, D.C., appointed vice chairman of the division, succeeding **Caleb R. Megee,** retired. **E. Paul Miller,** manager of port traffic and district manager at New York, succeeds Mr. Clark. **Charles A. Lauby,** district manager, Boston, Mass., transferred to New York. **John F. Reilly,** assistant to vice chairman, Washington, succeeds Mr. Lauby at Boston.

ATLANTIC COAST LINE.—John W. Hawthorne, general superintendent motive power and equipment, Wilmington, N. C., appointed chief mechanical officer there. **W. J. Turner** appointed assistant general superintendent, Southern division, Jacksonville, Fla. Abolished position of superintendent transportation, Southern division, formerly held by Mr. Turner.

N. S. DeMuth appointed assistant general freight agent, Wilmington.

MISSOURI PACIFIC—M. L. Smith, general superintendent of transportation, St. Louis, appointed general manager, Gulf district, Palestine, Tex., succeeding **Vernon A. Gordon,** promoted (RA, Dec. 1, p. 41). **J. A. Austin,** assistant chief personnel officer, St. Louis, named to succeed Mr. Smith, and in turn is replaced by **G. W. Johnson. K. M. Converse,** trainmaster, Osawatomie, Kan., named assistant superintendent, Alexandria Terminal, Alexandria, La., replacing **J. E. Harrell,** retired. Mr. Converse's successor is **W. B. Needham,** trainmaster, Chester, Cairo, Cape Girardeau and Sparta subdivisions, Chester, Ill., who in turn is succeeded by **R. L. Caldwell,** trainmaster, east and west, Benton and Mt. Vernon subdivisions, Chester. **J. W. Dunlap** transferred from the Little Rock Terminal, North Little Rock, Ark., to replace Mr. Caldwell, and in turn is replaced by **L. J. Brupbacher,** assistant trainmaster, Kingsville, Tex.

MONON.— Karl A. Voth, freight traffic manager, Chicago, appointed general traffic manager. **Otto Klein** appointed assistant to freight traffic manager (sales), Chicago.

Howard C. Greer, financial vice president and member of the board, Chicago, retired. He will continue as financial consultant and assistant to president until October 1959.

TEXAS & PACIFIC.—Claude R. Wilson, Jr., appointed attorney, Dallas, Tex.

WABASH.—D. C. Pate appointed assistant freight traffic manager, St. Louis, to succeed **George W. Young,** who retired Oct. 1.

WESTERN MARYLAND.—George K. Knox appointed traffic analyst, Baltimore. **Rudolph G. Stiemke,** assistant freight traffic manager, Baltimore, retired Nov. 1. **Albert F. Forster,** general freight agent, succeeds Mr. Stiemke. **W. Cecil Sinners** appointed general freight agent; **Joseph W. Roberts, Jr.,** named assistant general freight agent and **Carl N. Collins** appointed assistant to general freight agent.

OBITUARY

Clinton D. Sipe, 78, retired general manager and assistant to president, **Alton,** died Nov. 28.

Supply Trade

Franklin George, eastern manager of the **General Railway Signal Company** at New York, has been appointed assistant to vice president—sales at Rochester, N. Y. **Carl V. Scully,** assistant eastern manager, New York, has been named eastern manager there. **Albert G. Maier,** sales engineer, New York, has been appointed assistant eastern manager.

Daniel P. Murphy, manager of ordnance and industrial sales for the **Symington Wayne Corporation** (formerly Symington-Gould Corporation), Depew, N. Y. has retired from active duty after 42 years in the steel castings industry. Duties formerly assigned to Mr. Murphy are now being handled by **James S. Thompson, Jr.**

Franklin George

Carl V. Scully

Albert G. Maier

Arthur J. Doyle

Arthur J. Doyle, assistant vice president of the **Youngstown Steel Door Company,** Cleveland, has been elected a vice president.

North American Supply Company, Cleveland, Ohio, has been appointed regional sales representative for the **Archer-Daniels-Midland** Freight Liner System for upgrading railroad freight and covered hopper cars.

John H. Ingalls has been appointed a field service engineer in the Boston division of **A. M. Byers Company.**

Elmer Lehmkuhl has been appointed sales manager, Eastern division, **Arcair Company. Martin Boyer** is the new sales promotion and advertising manager. **Durward B. Vaught** has been named field representative in Virginia, Kentucky and Southern West Virginia, in addition to other Southern states which comprise his sales district.

OBITUARY

Charles F. Kettering, 82, retired vice president and general manager of research, **General Motors Corporation,** died Nov. 25 in his home at Dayton, Ohio.

Organizations

...am H. Ott

George O. Griffith

National Industrial Traffic League Elects New Officers

William H. Ott, of Chicago, general traffic manager of Kraft Foods, has been elected president of the National Industrial Traffic League. He succeeds Grant Arnold, general traffic manager of E. J. Lavino & Co., Philadelphia. George O. Griffith, director of traffic for American Home Products Corporation, New York, has been elected vice-president, succeeding Mr. Ott in that capacity.

Regional vice-presidents elected at the League's 51st annual meeting in New York last month are: L. F. Van Kleeck, traffic manager, Brown Company, Berlin, N. H.; R. A. Cooke, manager, Traffic department, American Newspaper Publishers Association, New York; O. H. Weaver, traffic manager, Happyvale Flour Mills, Griffin, Ga.; Theron Godbold, general traffic manager, Fabricon Products division, Eagle-Picher Company, River Rouge, Mich.; Hugo Waninger, vice-president—traffic, Anheuser-Busch, Inc., St. Louis; B. C. Worley, commissioner, Traffic Bureau, Ft. Smith, Ark; I. N. Early, manager, Traffic Bureau, Billings, Mont.; and J. E. Hale, traffic counselor, Standard Oil Company of California, San Francisco.

The following officers were re-elected: Treasurer—Robert Maguire, manager, Traffic division, Atlantic Refining Company, Philadelphia; chairman, board of directors—G. J. Pinkerton, traffic manager, Hills Bros.. Coffee, Inc., San Francisco; vice-chairman, board of directors—Harold T. Reed, director of transportation, Line Material Industries, McGraw-Edison Company, Milwaukee; chairman, executive committee—E. W. Girton, general traffic manager, Wilson & Co., Chicago; vice-chairman, executive committee—R. M. Boyd, general traffic manager, Pittsburgh Plate Glass Company, Pittsburgh; executive secretary—Lester J. Dorr, Washington, D. C.; and assistant secretary—James E. Bartley, Washington.

The League's 1959 annual meeting will be held at the Palmer House, Chicago, November 12 and 13.

You Ought To Know...

Running time is 70 hours on hot-shot freight runs from Chicago to West Coast points, starting Dec. 8. Generally, the new schedules provide Monday, Friday and Saturday night departures (also Thursday on the Rock Island) with third evening arrival and fourth morning delivery on the coast. Consists will be rail and forwarder merchandise and piggyback. Among the roads offering the 24-hour-schedule speedup (second 24-hour reduction this year) are Rock Island, Santa Fe, Burlington, Southern Pacific, Rio Grande, and Western Pacific.

Increased parcel post rates are now formally proposed by the postmaster general. He has asked the ICC to consent to raises averaging about 17 per cent and expected to yield $88,800,000.

Union Pacific is seeking a rehearing on a Colorado Supreme Court decision which held that early settlers who bought land from the railroads also acquired mineral rights. UP said the ruling as it now stands would upset the stability on which the commercial development of Colorado was based (RA, Nov. 3, p. 7).

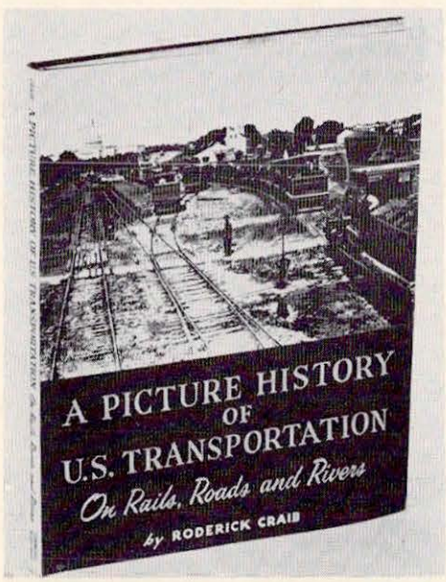
New general manager of the National Railways of Mexico is Benjamin Mendez. He was appointed by the new president of Mexico, Sr. Lopez Mateos. Sr. Mendez has been general manager of the Pacifico Railroad (formerly Southern Pacific of Mexico).

A $2,956,180.30 refund on overpayment of income taxes for 1942 and 1943 has been received by Chicago & North Western (RA, Apr. 21, p. 7). The money will be included in "Available Net Income" for 1958, will be paid to holders of the company's Second Mortgage 4½ per cent convertible income bonds (interest accumulations on the bonds totaled 11.37 per cent as of last Dec. 31). Still pending: C&NW refund claims covering a number of years subsequent to 1943.

A new version of family fares for Christmas-season travel into St. Louis, Kansas City, Little Rock and Houston is being used by MoPac. Children (ages 5-12) can ride for 25 cents, round-trip, when accompanied by an adult. The price of a one-way ticket serves as round-trip fare for the adult. Special fares apply Saturdays and Sundays until Dec. 21. Originating points include Poplar Bluff and Jefferson City, Mo.; McGehee, Ark.; Bay City and Beaumont, Tex. Other roads, among them C&NW, have also set up special low-cost holiday fare plans.

Milwaukee Road's Flexi-Van service is expected to start between Chicago and the Twin Cities by Dec. 17. The road was to begin receiving its equipment from Strick last week. Later, Flexi-Van operations will be extended to Omaha and Kansas City.

Vermont fears that lack of business may drive railroads out of the state. "At the present rate of decline in passengers," says a Public Service Commission report, "it may very well be expected that the future will see no passenger trains operating in Vermont. And with increased trucking use, the railroad freight business decline may in time force the railroads in less thickly settled areas like Vermont to suspend operating entirely."



COMING OUT THIS WEEK is Railway Age Associate Editor Rod Craib's "Picture History of U.S. Transportation." With 228 photographs, the book details transportation development from the 1830's to the present. Copies are available at $6.00 in book stores or direct from Simmons-Boardman Books, 30 Church St., New York 7, N.Y.

World's largest banana terminal has been officially opened in Baltimore. The new $5,500,000 Locust Point Fruit Terminal was built by the Baltimore & Ohio primarily for servicing United Fruit Company's "Great White Fleet" of banana ships. To mark the event, B&O this month is serving banana shortcake and pan-fried bananas in its dining cars.

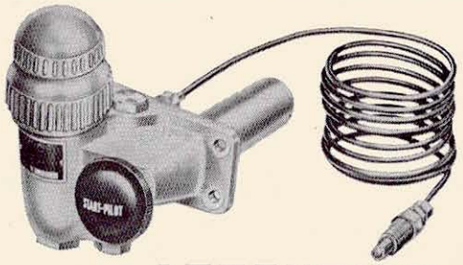
Southern Pacific's "Shasta Daylight" (San Francisco-Portland) will be cut back to a thrice-weekly operation Jan. 15. Daily schedules will be run only during the Christmas holidays and the summer vacation season (May 28-Sept. 15). Off-season patronage of the train, SP says, no longer justifies daily operation.

A new type freight car of German construction is being tested by the Swedish State Railways. The 23-ton-capacity car, says a Swedish Railways spokesman, combines the advantages of a gondola with those of a box car. Its roof and sides may be pushed open to one-half of the car's total length.

"Responsible interest in politics . . . is not one which can be delegated to subordinates, nor bought off the counter," declared Lackawanna President P. M. Shoemaker in accepting the New York City West Side Award of that city's West Side Association of Commerce. "If business is to attain political stature, and respect, and accompanying power, it must contribute to government as well as receive its protection."

Philadelphia's Operation Northwest proved "highly promising" during its first month, says City Solicitor David Berger. The experimental program—which offers 30-cent train fares, frequent service, and bus-to-train transfers—has taken "hundreds of rush-hour commuters and shoppers" off the highways, says Mr. Berger, and "the effect of the program in helping to ease center city traffic is beginning to appear."

The private enterprise economy will be replaced by a socialistic state "unless selfish demands upon the government are curbed by self-restraint," AWR President C. M. Roddewig warned last week. "Almost every time we turn around," he told a Nebraska audience, "the federal government has assumed additional regulation or control over some phase of our existence."



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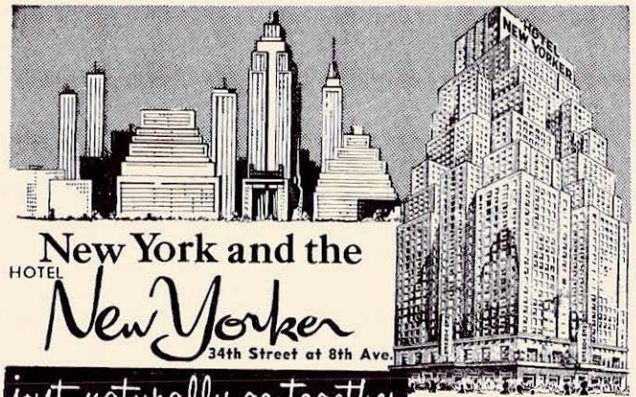

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To perform inspectional duties on all stages of construction of electric passenger cars to be built for the City of Philadelphia, assuring that construction methods and materials conform to plans and specifications. Job to start in February, 1959 and to last for about eighteen months. Job site will probably be located in one of these cities: Philadelphia, Pa.; St. Louis, Mo.; Berwick, Pa.; Worchester, Mass. Experience as master mechanic or car shop superintendent and engineering knowledge desirable. Other experience considered. Send resume, character references, and weekly salary requirement to Mr. E. L. Tennyson, Transit Operations Engineer, Room 1330 City Hall Annex, Philadelphia 7, Penna.

POSITION OPEN

Man wanted to do sales promotion work in the New York and Philadelphia area for old established manufacturing firm in railway engineering and mechanical fields. Sales experience required. Box 872, RAILWAY AGE 30 Church Street, New York 7, N.Y.

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Graduate C. E. with Maintenance of Way background. Prefer location in Northwest or Midwest. Age 31. Box 873, RAILWAY AGE, 30 Church Street, New York 7, N. Y.

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Maintenance Equipment Co. 35
National Malleable & Steel Castings Co. 13
Standard Oil of California 12
Start Pilot Corp. 43
Stran-Steel Corp. ..... Inside Front Cover
Timken Roller Bearings Co. ..... Back Cover
Wine Railway Appliance Co. ..... Inside Back Cover

What Rates for Competition?

Several Interstate Commerce Commissioners have been making speeches, revealing what (if any) changes in regulation the Transportation Act of 1958 may have called for.

Some of the commissioners seem to have developed an affection for "fully distributed costs" as a measure of whether proposed competitive rates harmonize with national transportation policy or not.

This doctrine, if it should predominate, would mean real trouble for the railroads.

Of course, coverage of all costs of doing business (and then some), as a target to aim at, is acceptable and necessary for railroads or any other business. But the lack of assurance that such costs will be covered *immediately* by proposed rate changes on every item of specific traffic is an entirely different matter.

There are three kinds of so-called "costs" that have to be considered in this situation, viz. (1) "out-of-pocket," (2) "overhead" and (3) "fully distributed." Out-of-pocket costs are the extra costs incurred on account of a particular shipment, and which would be avoided if the traffic did not move. Overhead costs are the constant costs (supervision, clerical expense, etc.) which do not vary with traffic volume. Fully distributed costs are the sum of the out-of-pocket and overhead costs (the latter being allocated to particular traffic by some arbitrary formula).

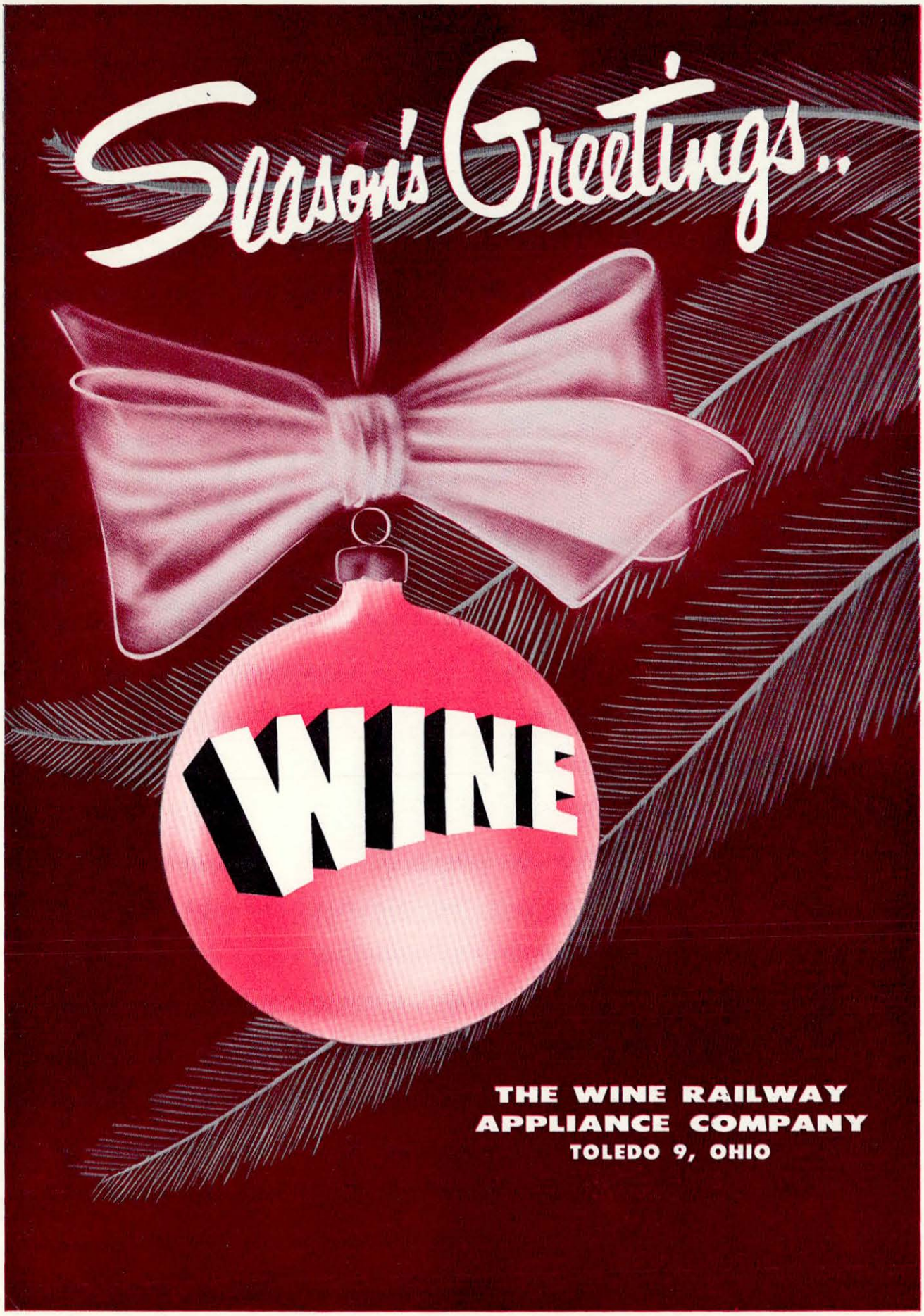
Earning all costs (and then some) is a goal for the operation of the enterprise, as a whole and for the long pull. As far as the rates on a particular commodity are concerned, they will make their greatest possible contribution to the earning of "fully distributed costs" of the whole enterprise in the long run if: (1) they fully cover out-of-pocket costs, and (2) earn as much above out-of-pocket costs (i.e., "contribution to overhead") as they can be made to earn. It isn't a question of maximizing the "contribution" earned by each unit of the commodity handled, but rather getting the total "contribution" of all units as large as possible.

If handling a given unit of traffic costs out-of-pocket $1 and a rate of $1.50 attracts a million of these units, this rate gives the railroad a "contribution" to overhead costs and profit of $500,000. But a rate of $1.25 might attract 4 million units—with a total "contribution" of $1,000,000. The railroad which increases its traffic volume and total "contribution" in this manner is quite likely to earn "fully distributed costs" on its entire operation. It is more likely to do so than if it insists right at the beginning on collecting "fully distributed costs" on each and every item of its traffic.

It might well be that the $1.50 rate would cover fully distributed costs, at the beginning, but would induce traffic diversion to competition. Since "overhead costs" (those above "out-of-pocket") are invariable, by definition, then, if traffic should decline, the "overhead cost" per unit of traffic remaining would rise. So, a rate based on a "fully distributed cost" of $1.50 might drive away enough traffic so that the "fully distributed cost" would rise to $1.55. Up would go the rate again (if the "fully distributed cost" doctrine were followed)—and traffic would decline still further. Once more, rates based on "fully distributed costs" would have to be raised. And so on until all the traffic would be driven away.

There are mighty few businesses that experiment with new prices which expect to "get their bait back" the very first day they put their new prices into effect. Progress comes only from taking reasonable risks, and if railroads can't hazard anything in making business-building rates, then they're going to have a tough time competing.

LET'S HAVE A THOROUGH DISCUSSION: The issue will have to be thoroughly debated—either before the commission, or the courts, or committees of Congress. The more railroad men inform themselves about the subject, the more likely they will be to secure the ultimate adoption of sound policies.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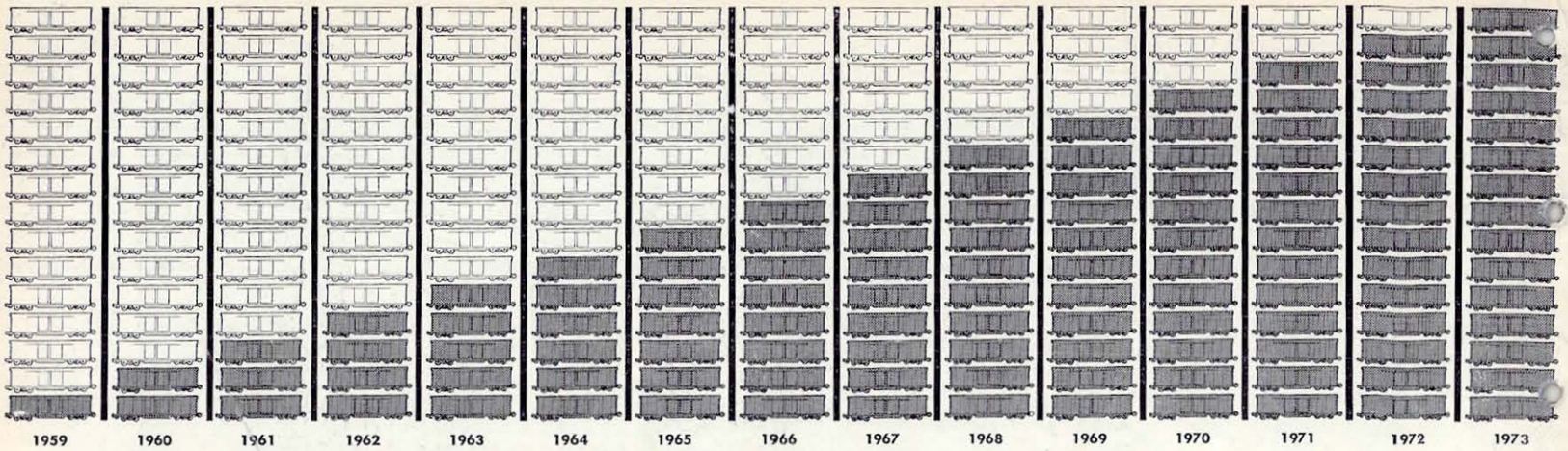


HERE'S A PLAN that will save railroads $288,000,000 a year!*

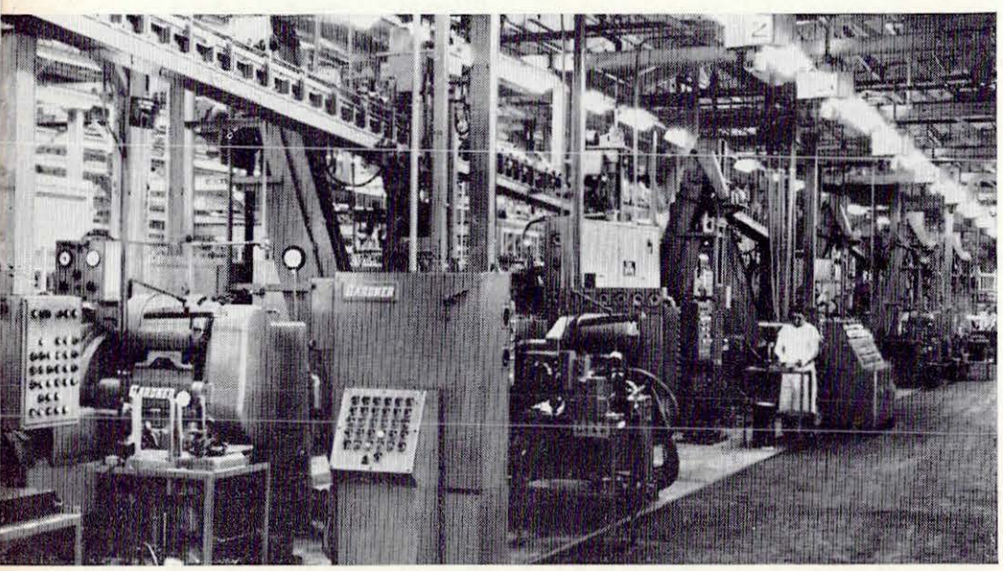
The railroads will save $288,000,000 a year in maintenance and operating costs when *all* freight cars are equipped with roller bearings—the bearings all railroaders want sooner or later. Here's a plan to start your roller bearing program—and savings—now!

Each railroad could put a certain percentage of its freight cars on roller bearings every month or every year. With all the railroads participating on a regular basis, the cost of putting roller bearings on freight cars would be held down. What's more you would be able to set up economical shop schedules to further reduce the cost of going "Roller Freight". And by putting these "Roller Freight" cars in interchange, all the railroads would get their share of the benefits. Benefits like these:

One railroad's Timken-bearing-equipped freight cars rolled over 300,000,000 car miles with only *one* overheated bearing. On another line, Timken-bearing-equipped cars recently rolled 216,000 miles each *without adding lubricant.* That's how Timken® bearings give you a 24½% return on the investment—why 69 railroads and other car owners have already put over 26,000 freight cars on Timken bearings.

Talk over this plan with your other railroad friends. The best time to start your "Roller Freight" modernization and new car program is right now.

**Based on 1958 labor and material costs. At anticipated 1973 costs, 15 years from now, savings would rise to an estimated $610,000,000.*



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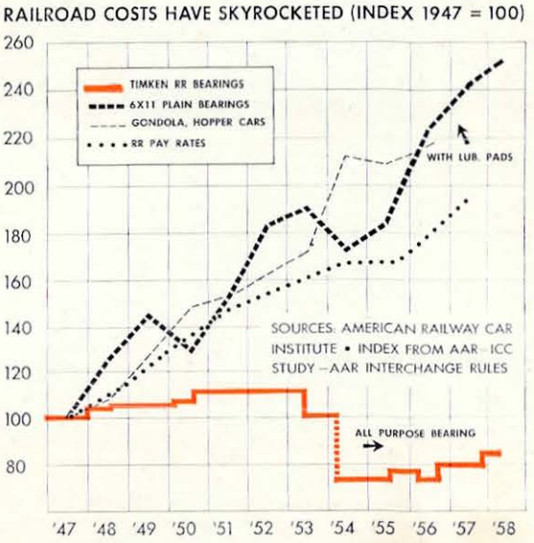

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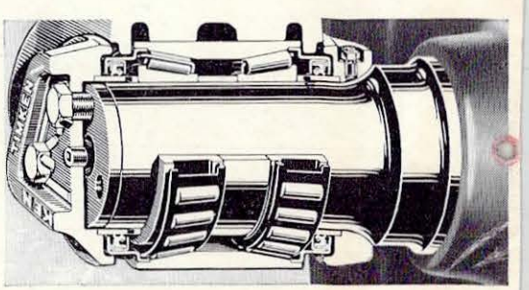

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